PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Roman MEYER et al.

Serial No.: 10/583,415

Filed: June 15, 2006

For: ENDOTOXIN DETECTION METHOD

Group Art Unit: 1645

Examiner: Not Yet Assigned

Atty. Dkt. No.: DEBE:067US

Confirmation No.: 6633

CERTIFICATE OF ELECTRONIC TRANSMISSION 37 C.F.R. § 1.8

I hereby certify that this correspondence is being electronically filed with the United States Patent and Trademark Office via EFS-Web on the date below:

January 27, 2010

Date

Steven L. Highlander

PETITION FOR REVIVAL OF AN APPLICATION FOR PATENT ABANDONED UNAVOIDABLY UNDER 37 C.F.R § 1.137(a) and RESPONSE TO NOTIFICATION OF ABANDONMENT MAILED DECEMBER 30, 2009

Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

Sir:

In response to the Notification of Abandonment, dated December 30, 2009, for Applicants' failure to respond to the Notification of Missing Requirements (Form PCT/DO/EO/905), mailed June 2, 2009 within the time period set therein, Applicants' undersigned representative requests that the Notification of Abandonment, dated December 30, 2009, be withdrawn for the reasons stated herein.

The United States Patent Office issued a Notification of Defective Response on June 2, 2009, indicating that the Sequence Listing submitted in response to the Notification of Missing Requirements on October 31, 2008 in the present application was defective as based on the marked-up "Raw Sequence listing" dated December 2, 2008 (attached hereto as Exhibit A). The marked-up "Raw Sequence Listing" dated December 2, 2008 lists "Total Warnings: 15" and "Total Errors: 0".

Prior to submitting the Response to Notification of Defective Response on June 24, 2009, Sandra Bass of Fulbright & Jaworski, LLP in Austin, Texas, contacted Mr. Mark Spencer of the Scientific and Technical Information Center at the United States Patent Office to inquire as to correcting the "defects" in the Sequence Listing submitted on October 31, 2008. Specifically, Ms. Bass inquired as to the difference between the "warnings" and "errors" identified on the marked-up "Raw Sequence Listing" issued in the present application. Mr. Spencer told Ms. Bass that the warnings are of no concern to the applicants; further, Mr. Spencer said the warnings are "flags" for the sequencer reviewers at the Patent Office and are not errors to be corrected upon.

Applicants' representative then submitted a response to the Notification of Defective Response on June 24, 2009, which included a second substitute Sequence Listing in .txt format (attached hereto as Exhibit B).

On July 14, 2009 the United States Patent Office issued a Notification of Defective Response (attached as Exhibit C), indicating that the content of the computer readable form previously submitted "does not comply with the requirements of 37 C.F.R 1.822 and/or 1.823, as indicated on the attached copy of the marked-up "Raw Sequence Listing." The marked-up "Raw

Sequence Listing" dated July 2, 2009 includes "Total Warnings: 15" and "Total Errors: 8." Further, the marked-up "Raw Sequence Listing" states that the 15 total warnings are "Ok and require no response."

On September 28, 2009, applicants' representative received a Notification of Abandonment, dated September 24, 2009, from the United States Patent Office for failure "to respond to the Notification of Missing Requirements (Form PCT/DO/EO/905), mailed July 14, 2009 within the period set therein" (attached as Exhibit D). Applicants' representative submits that the Notification of Defective Response mailed July 14, 2009 was never received, as evidenced by the Petition Under 37 C.F.R. § 1.181(A) To Withdraw Holding of Abandonment Based on Failure to Response to Notification of Defective Response submitted to the United States Patent Office on November 13, 2009 (Attached as Exhibit E).

In addition to the Petition Under 37 C.F.R. § 1.181(A) To Withdraw Holding of Abandonment Based on Failure to Response to Notification of Defective Response submitted on November 12, 2009, applicants' representative submitted a third substitute Sequence Listing in .txt format correcting the errors set forth in the marked-up "Raw Sequence Listing" dated July 2, 2009 (attached as Exhibit F).

A Decision Under 37 C.F.R § 1.181 in response to applicant's "Petition Under 37 C.F.R. 1.181(A) to Withdraw Holding of Abandonment Based on Failure to Respond to Notification of Defective Response" was issued on December 8, 2009, dismissing the aforementioned Petition as "moot". The Decision Under 37 C.F.R § 1.181 noted that the Notification of Defective Response, mailed July 2, 2009, was sent in error and that the present application was actually

abandoned "for failure to timely file a proper reply to the Notification of Defective Response mailed June 2, 2009.

Included in the "Discussion" of the Decision Under 37 C.F.R § 1.181, applicants were referred to "the attached sequence listing error report" (attached as Exhibit G) for clarification on the improper reply to the Notification of Defective Response mailed June 2, 2009.

The first line of the first page of the "sequence listing error report," dated November 25, 2009, attached to the Decision Under 37 C.F.R § 1.81 states "Sequence Listing was accepted" as reviewed by Durreshwar Anjum. Moreover, the "sequence listing error report" again notes "Total Warnings: 15" and "Total Errors: 0."

On or around January 13, 2010, Ms. Bass contacted Anne Corrigan of the Scientific and Technical Information Center at the United States Patent Office to discuss the sequence listings submitted in the present application. Ms. Corrigan explained that the "warnings" identified in the marked-up "Raw Sequence Listings" for the present application were in fact errors to be corrected. Ms. Bass explained to Ms. Corrigan that Mr. Spencer had previously said "warnings" served as flags for the sequence reviewer at the United States Patent Office and are not to be corrected by the applicant(s). Ms. Corrigan continued her explanation that in this particular situation, the "warnings" should have been corrected by the applicant(s).

Applicants' representative respectfully requests the Notification of Abandonment, dated December 30, 2009, be withdrawn due to the fact that applicants' representatives were misinformed by personnel of the United States Patent Office regarding the need for warnings noted on the marked-up "Raw Sequence Listing" dated December 2, 2008 to be corrected.

It is believed that no fee is due with this communication, however, should any fees under 37 C.F.R. §§ 1.16 to 1.21 be required for any reason relating to the enclosed document, the Commissioner is authorized to deduct or credit said fees from or to Fulbright & Jaworski Deposit Account No. 50-1212/DEBE:067US.

Respectfully submitted,

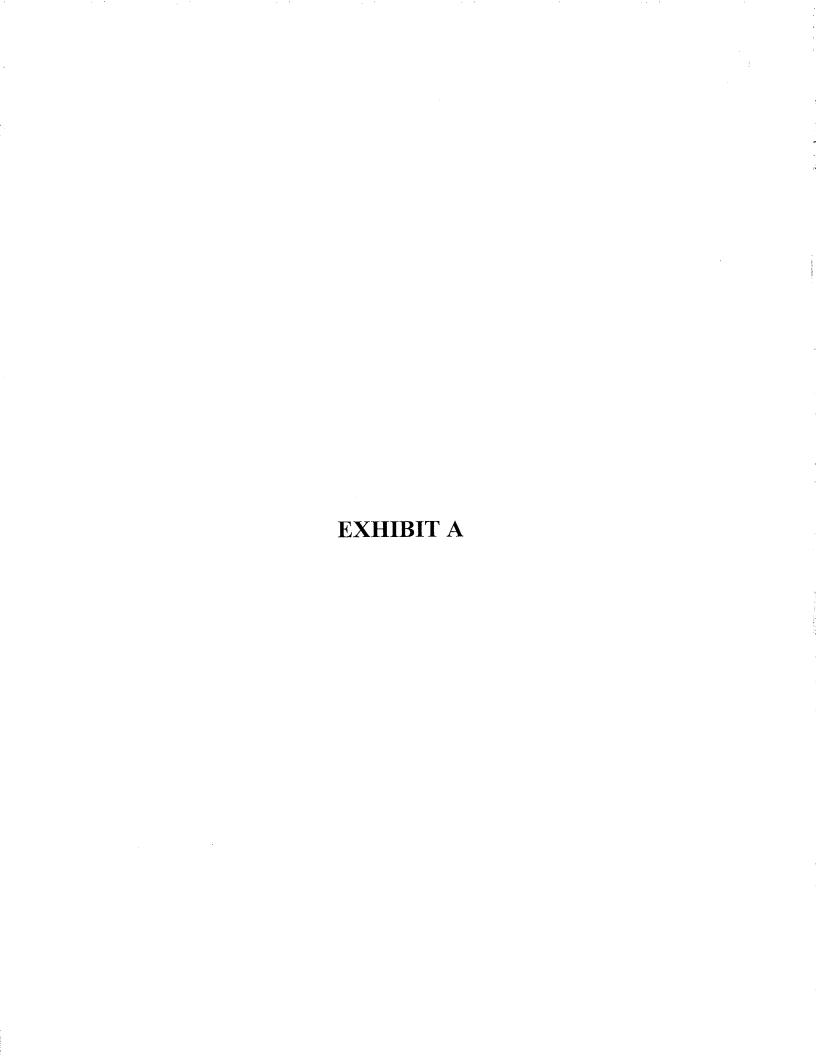
Steven M. Highlander Reg. No. 37,642

Attorney for Applicants

FULBRIGHT & JAWORSKI L.L.P. 600 Congress Avenue, Suite 2400 Austin, Texas 78701 (512) 474-5201

Date:

January 27, 2010





32425

SUITE 2400

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Vignia 22313-1450 www.uspto.gov

U.S. APPLICATION NUMBER NO.

FIRST NAMED APPLICANT

ATTY. DOCKET NO.

10/583,415

FULBRIGHT & JAWORSKI L.L.P.

Roman MEYER

DEBE:067US/ 10607189 INTERNATIONAL APPLICATION NO.

PCT/DE2004/002778

I.A. FILING DATE

PRIORITY DATE

12/20/2004

12/20/2003

CONFIRMATION NO. 6633 371 FORMALITIES LETTER



Date Mailed: 06/02/2009

600 CONGRESS AVE.

AUSTIN, TX 78701

NOTIFICATION OF DEFECTIVE RESPONSE

The following items have been submitted by the applicant or the IB to the United States Patent and Trademark Office as an Elected Office (37 CFR 1.495):

- · Indication of Small Entity Status
- Priority Document
- Copy of the International Application filed on 06/15/2006
- English Translation of the IA filed on 06/15/2006
- Copy of the International Search Report filed on 06/15/2006
- Copy of IPE Report filed on 06/15/2006
- Preliminary Amendments filed on 06/15/2006
- Information Disclosure Statements filed on 02/13/2007
- Biochemical Sequence Diskette filed on 10/31/2008
- · Oath or Declaration filed on 10/31/2008
- Biochemical Sequence Listing filed on 10/31/2008
- U.S. Basic National Fees filed on 06/15/2006
- Priority Documents filed on 06/15/2006
- Power of Attorney filed on 10/31/2008
- Non-English Language Application filed on 06/15/2006

Applicant's response filed 10/31/2008 is hereby acknowledged. The following requirements set forth in the NOTIFICATION of MISSING REQUIREMENTS mailed 09/02/2008 have not been completed.

• A copy of the "Sequence Listing" in computer readable form has been submitted. However, the content of the computer readable form does not comply with the requirements of 37 CFR 1.822 and/or 1.823, as indicated on the attached copy of the marked -up "Raw Sequence Listing." Applicant must provide a substitute computer readable form (CRF) copy of the "Sequence Listing" and a statement that the content of the sequence listing information recorded in computer readable form is identical to the written (on paper or compact disc) sequence listing and, where applicable, includes no new matter, as required by 37 CFR 1.821(e), 1.821(f), 1.821(g), 1.825(b), or 1.825(d). Refer to attachment or PAIR document dated 12/2/2008.

Applicant is required to complete the response within a time limit of ONE MONTH from the date of this Notification or within the time remaining in the response set forth in the Notification of Missing Requirements, whichever is the longer. No extension of this time limit may be granted under 37 CFR 1.136, but the period for response set in the Notification of Missing Requirements may be extended under 37 CFR 1.136(a).

Applicant is cautioned that correction of the above items may cause the specification and drawings page count to exceed 100 pages. If the specification and drawings exceed 100 pages, applicant will need to submit the required application size fee.

For questions regarding compliance to 37 CFR 1.821-1.825 requirements, please contact:

- For Rules Interpretation, call (571) 272-0951
- For Patentin Software Program Help, call Patent EBC at 1-866-217-9197 or directly at 703-305-3028 / 703-308-6845 between the hours of 6 a.m. and 12 midnight, Monday through Friday, EST.
- · Send e-mail correspondence for Patentin Software Program Help @ ebc@uspto.gov

Applicant is reminded that any communications to the United States Patent and Trademark Office must be mailed to the address given in the heading and include the U.S. application no. shown above (37 CFR 1.5)

Registered users of EFS-Web may alternatively submit their reply to this notice via EFS-Web. https://sportal.uspto.gov/authenticate/AuthenticateUserLocalEPF.html

For more information about EFS-Web please call the USPTO Electronic Business Center at **1-866-217-9197** or visit our website at http://www.uspto.gov/ebc.

If you are not using EFS-Web to submit your reply, you must include a copy of this notice.

KAREN R MCLEAN	
Telephone: (703) 756-1463	

Sequence Listing could not be accepted. If you need help call the Patent Electronic Business Center at (866) 217-9197 (toll free). Reviewer: markspencer Timestamp: [year=2008; month=12; day=2; hr=15; min=14; sec=30; ms=124;] The state of the s *********** Reviewer Comments: <21.0> 9 <211> 527 <212> PRT <213> protein p12 of T2 phage * * * * * * * * * <210> 10 <211> 527 <212> PRT <213> protein pl2 of T4 phage * * * * * * * * <210> 11 <211> 518 <212> PRT <213> protein pl2 of PP01 phage * * * * * * * * * <210> 12 <211> 516 <212> PRT <213> protein p12 of RB69 phage * * * * * * * * * <210> 13 <211> 516 <212> PRT <213> protein pl2 of AR1 phage * * * * * * * * <210> 14 <211> 527 <212> PRT

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Validated By CRFValidator v 1.0.3

Application No:

10583415

Version No:

1.0

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Finished: 2008-10-31 10:24:01.953

Elapsed: 0 hr(s) 0 min(s) 1 sec(s) 535 ms

Total Warnings: 15

Total Errors: 0

No. of SeqIDs Defined: 15

Actual SeqID Count: 1

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SEQUENCE LISTING

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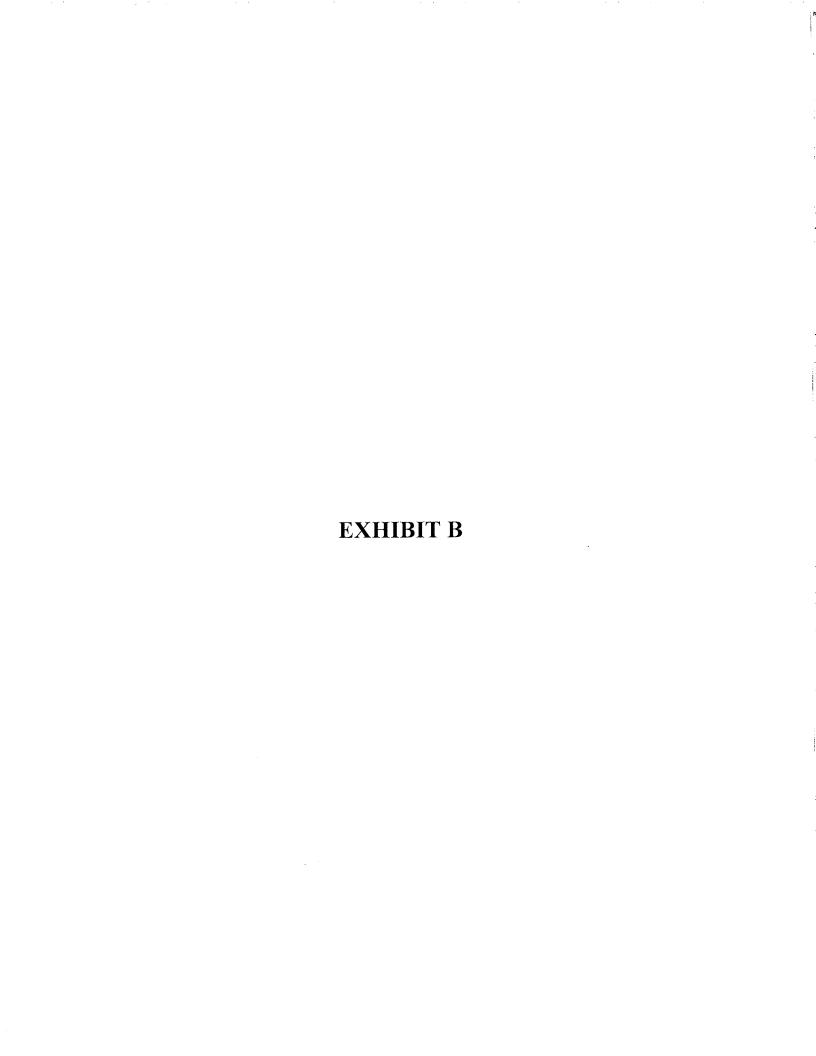
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PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Roman MEYER et al.

Serial No.: 10/583,415

Filed: June 15, 2006

For: ENDOTOXIN DETECTION METHOD

Group Art Unit: 1645

Examiner: Not Yet Assigned

Atty. Dkt. No.: DEBE:067US

Confirmation No.: 6633

CERTIFICATE OF ELECTRONIC TRANSMISSION

37 C.F.R. § 1.8

I hereby certify that this correspondence is being electronically filed with the United States Patent and Trademark Office via EFS-Web on the ate below:

June 24, 2009

Highlander Steven

RESPONSE TO NOTIFICATION OF DEFECTIVE RESPONSE

Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

Sir:

In response to the Notification of Defective Response, dated June 2, 2009, there are enclosed herewith:

- Substitute Sequence Listing in .txt format; and (a)
- A copy of Notification of Defective Response. (b)

It is believed that no fee is due with this communication, however, should any fees under 37 C.F.R. §§ 1.16 to 1.21 be required for any reason relating to the enclosed document, the Commissioner is authorized to deduct or credit said fees from or to Fulbright & Jaworski Deposit Account No. 50-1212/DEBE:067US.

Respects ly submitted,

Steven L. Highlander Reg. No. 37,642

Attorney for Applicants

FULBRIGHT & JAWORSKI L.L.P. 600 Congress Avenue, Suite 2400 Austin, Texas 78701 (512) 474-5201

Date:

June 24, 2009



32425

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United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENT'S P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

U.S. APPLICATION NUMBER NO.

FIRST NAMED APPLICANT

ATTY. DOCKET NO.

10/583,415

Roman MEYER

DEBE:067US/ 10607189

FULBRIGHT & JAWORSKI L.L.P.

INTERNATIONAL APPLICATION NO.

PCT/DE2004/002778

I.A. FILING DATE

PRIORITY DATE 12/20/2003

12/20/2004

CONFIRMATION NO. 6633 371 FORMALITIES LETTER



Date Mailed: 06/02/2009

600 CONGRESS AVE.

AUSTIN, TX 78701

NOTIFICATION OF DEFECTIVE RESPONSE

The following items have been submitted by the applicant or the IB to the United States Patent and Trademark Office as an Elected Office (37 CFR 1.495):

- · Indication of Small Entity Status
- Priority Document
- Copy of the International Application filed on 06/15/2006
- English Translation of the IA filed on 06/15/2006
- Copy of the International Search Report filed on 06/15/2006
- Copy of IPE Report filed on 06/15/2006
- Preliminary Amendments filed on 06/15/2006
- Information Disclosure Statements filed on 02/13/2007
- Biochemical Sequence Diskette filed on 10/31/2008
- Oath or Declaration filed on 10/31/2008
- Biochemical Sequence Listing filed on 10/31/2008
- U.S. Basic National Fees filed on 06/15/2006
- Priority Documents filed on 06/15/2006
- Power of Attorney filed on 10/31/2008
- Non-English Language Application filed on 06/15/2006

Applicant's response filed 10/31/2008 is hereby acknowledged. The following requirements set forth in the NOTIFICATION of MISSING REQUIREMENTS mailed 09/02/2008 have not been completed.

· A copy of the "Sequence Listing" in computer readable form has been submitted. However, the content of the computer readable form does not comply with the requirements of 37 CFR 1.822 and/or 1.823, as indicated on the attached copy of the marked -up "Raw Sequence Listing." Applicant must provide a substitute computer readable form (CRF) copy of the "Sequence Listing" and a statement that the content of the sequence listing information recorded in computer readable form is identical to the written (on paper or compact disc) sequence listing and, where applicable, includes no new matter, as required by 37 CFR 1.821(e), 1.821(f), 1.821(g), 1.825(b), or 1.825(d). Refer to attachment or PAIR document dated 12/2/2008.

Applicant is required to complete the response within a time limit of ONE MONTH from the date of this Notification or within the time remaining in the response set forth in the Notification of Missing Requirements, whichever is the longer. No extension of this time limit may be granted under 37 CFR 1.136, but the period for response set in the Notification of Missing Requirements may be extended under 37 CFR 1.136(a).

Applicant is cautioned that correction of the above items may cause the specification and drawings page count to exceed 100 pages. If the specification and drawings exceed 100 pages, applicant will need to submit the required application size fee.

For questions regarding compliance to 37 CFR 1.821-1.825 requirements, please contact:

- For Rules Interpretation, call (571) 272-0951
- For Patentin Software Program Help, call Patent EBC at 1-866-217-9197 or directly at 703-305-3028 / 703-308-6845 between the hours of 6 a.m. and 12 midnight, Monday through Friday, EST.
- Send e-mail correspondence for Patentin Software Program Help @ ebc@uspto.gov

Applicant is reminded that any communications to the United States Patent and Trademark Office must be mailed to the address given in the heading and include the U.S. application no. shown above (37 CFR 1.5)

Registered users of EFS-Web may alternatively submit their reply to this notice via EFS-Web. https://sportal.uspto.gov/authenticate/AuthenticateUserLocalEPF.html

For more information about EFS-Web please call the USPTO Electronic Business Center at 1-866-217-9197 or visit our website at http://www.uspto.gov/ebc.

If you are not using EFS-Web to submit your reply, you must include a copy of this notice.

KAREN R MCLEAN

Telephone: (703) 756-1463

DEBE067US.txt SEQUENCE LISTING

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DEBE067US.txt

Phe Gln Asn Arg Tyr Ser Ser Glu Ser Ser Asn Gly Val Ile Lys Ile Ser Ser Thr Pro Ala Ala Leu Ala Gly Val Asp Asp Thr Thr Ala Met Thr Pro Leu Lys Thr Gln Lys Leu Ala Ile Lys Leu Ile Ser Gln Ile Ala Pro Ser Glu Asp Thr Ala Ser Glu Ser Val Arg Gly Val Val Gln Leu Ser Thr Val Ala Gln Thr Arg Gln Gly Thr Leu Arg Glu Gly Tyr 195 200 205 Ala Ile Ser Pro Tyr Thr Phe Met Asn Ser Val Ala Thr Gln Glu Tyr Lys Gly Val Ile Arg Leu Gly Thr Gln Ser Glu Ile Asn Ser Asn Leu 225 230 Gly Asp val Ala val Thr Gly Gly Thr Leu Asn Gly Arg Gly Ala Thr Gly Ser Met Arg Gly Val Val Lys Leu Thr Thr Gln Ala Gly Ile Ala 260 265 270 Pro Glu Gly Asp Ser Ser Gly Ala Leu Ala Trp Asn Ala Asp Val Ile 275 280 285 Asn Thr Arg Gly Gly Gln Thr Ile Asn Gly Ser Leu Asn Leu Asp His Leu Thr Ala Asn Gly Ile Trp Ser Arg Gly Gly Met Trp Lys Asn Gly 305 310 315 320 Asp Gln Pro Val Ala Thr Glu Arg Tyr Ala Ser Glu Arg Val Pro Val 325 330 335 Gly Thr Ile Met Met Phe Ala Gly Asp Ser Ala Pro Pro Gly Trp Ile 340 345 350Met Cys His Gly Gly Thr Val Ser Gly Asp Gln Tyr Pro Asp Tyr Arg 355 360 365 Asn Thr Val Gly Thr Arg Phe Gly Gly Asp Trp Asn Asn Pro Gly Ile

Page 15

Pro Asp Met Arg Gly Leu Phe Val Arg Gly Ala Gly Thr Gly Gly His 385 390 395 400

Ile Leu Asn Gln Arg Gly Gln Asp Gly Tyr Gly Lys Asp Arg Leu Gly 405 410 415

Val Gly Cys Asp Gly Met His Val Gly Gly Val Gln Ala Gln Gln Met 420 425 430

Ser Tyr His Lys His Ala Gly Gly Trp Gly Glu Tyr Asn Arg Ser Glu 435 440 445

Gly Pro Phe Gly Ala Ser Val Tyr Gln Gly Tyr Leu Gly Thr Arg Lys 450 455 460

Tyr Ser Asp Trp Asp Asn Ala Ser Tyr Phe Thr Asn Asp Gly Phe Glu 465 470 475 480

Leu Gly Gly Pro Arg Asp Ala Leu Gly Thr Leu Asn Arg Glu Gly Leu 485 490 495

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Lys Ile His Tyr 515

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<400> 14

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Gln Ala Ala Ile Ala Ala Ile Ser Pro Ala Gly Val Asn Gly Val Pro 35 40 45

Asp Ala Ser Ser Thr Thr Lys Gly Ile Leu Phe Leu Ala Thr Glu Gln 50 60

DEBE067US.txt

Glu Val Ile Asp Gly Thr Asn Asn Thr Lys Ala Val Thr Pro Ala Thr 65 70 75 80 Leu Ala Thr Arg Leu Ser Tyr Pro Asn Ala Thr Glu Thr Val Tyr Gly
85 90 95 Leu Thr Arg Tyr Ser Thr Asn Asp Glu Ala Ile Ala Gly Val Asn Asn $100 \hspace{1cm} 105 \hspace{1cm} 110$ Glu Ser Ser Ile Thr Pro Ala Lys Phe Thr Val Ala Leu Asn Asn Ala 115 120 125 Phe Glu Thr Arg Val Ser Thr Glu Ser Ser Asn Gly Val Ile Lys Ile 130 135 140 Ser Ser Leu Pro Gln Ala Leu Ala Gly Ala Asp Asp Thr Thr Ala Met 145 150 160 Thr Pro Leu Lys Thr Gln Gln Leu Ala Ile Lys Leu Ile Ala Gln Ile Ala Pro Ser Glu Thr Thr Ala Thr Glu Ser Asp Gln Gly Val Val Gln Leu Ala Thr Val Ala Gln Val Arg Gln Gly Thr Leu Arg Glu Gly Tyr 195 200 205 Ala Ile Ser Pro Tyr Thr Phe Met Asn Ser Ser Ala Thr Glu Glu Tyr Lys Gly Val Ile Lys Leu Gly Thr Gln Ser Glu Val Asn Ser Asn Asn 225 230 235 240 Ala Ser val Ala val Thr Gly Ala Thr Leu Asn Gly Arg Gly Ser Thr Thr Ser Met Arg Gly Val Val Arg Leu Thr Thr Thr Ala Gly Ser Gln 260 265 270 Ser Gly Gly Asp Ala Ser Ser Ala Leu Ala Trp Asn Ala Asp Val Ile 275 280 285 His Gln Arg Gly Gly Gln Thr Ile Asn Gly Thr Leu Arg Ile Asn Asn 300 Thr Leu Thr Ile Ala Ser Gly Gly Ala Asn Ile Thr Gly Thr Val Asn 315 Page 17

DEBE067US.txt

Met Thr Gly Gly Tyr Ile Gln Gly Lys Arg Val Val Thr Gln Asn Glu 325 330 335 Ile Asp Arg Thr Ile Pro Val Gly Ala Ile Met Met Trp Ala Ala Asp $340 \hspace{1cm} 345 \hspace{1cm} 350$ Ser Leu Pro Ser Asp Ala Trp Arg Phe Cys His Gly Gly Thr Val Ser 355 360 365 Ala Ser Asp Cys Pro Leu Tyr Ala Ser Arg Ile Gly Thr Arg Tyr Gly 370 380 Gly Ser Ser Ser Asn Pro Gly Leu Pro Asp Met Arg Gly Leu Phe Val 385 390 395 400 Arg Gly Ser Gly Arg Gly Ser His Leu Thr Asn Pro Asn Val Asn Gly 405 410 415 Asn Asp Gln Phe Gly Lys Pro Arg Leu Gly Val Gly Cys Thr Gly Gly Tyr Val Gly Glu Val Gln Lys Gln Gln Met Ser Tyr His Lys His Ala 435 440 445 Gly Gly Phe Gly Glu Trp Asp Asp Ser Gly Ala Phe Gly Asn Thr Arg 450 455 460 Arg Ser Asn Phe Val Gly Thr Arg Lys Gly Leu Asp Trp Asp Asn Arg 465 470 475 480 Ser Tyr Phe Thr Asn Asp Gly Tyr Glu Ile Asp Pro Ala Ser Gln Arg Asn Ser Arg Tyr Thr Leu Asn Arg Pro Glu Leu Ile Gly Asn Glu Thr 500 510 Arg Pro Trp Asn Ile Ser Leu Asn Tyr Ile Ile Lys Val Lys Glu 515 520 525 <210> <211> 516 <213> unknown <220> protein p12 of RB32-33 phage <223>

<400>

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DEBE067US.txt

Ser Ser Met Arg Gly Val Val Lys Leu Thr Thr Gln Ala Gly Ile Ala 260 265 270 Pro Glu Gly Asp Gly Ser Gly Ala Leu Ala Trp Asn Ala Asp Val Ile 275 280 285 Asn Thr Arg Gly Gly Gln Thr Ile Asn Gly Ser Leu Asn Leu Asp His Leu Thr Ala Asn Gly Ile Trp Ser Arg Gly Gly Met Trp Lys Asn Gly 305 310 315 320 Asp Gln Pro Val Ala Thr Glu Arg Tyr Ala Ser Glu Arg Val Pro Val Gly Thr Ile Met Met Phe Ala Gly Asp Ser Ala Pro Pro Gly Trp Ile 340 345 350 Met Cys His Gly Gly Thr Val Ser Gly Asp Gln Tyr Pro Asp Tyr Arg 355 360 365 Asn Thr val Gly Ala Arg Phe Gly Gly Asp Trp Asn Asn Pro Gly Ile Pro Asp Met Arg Gly Leu Phe Val Arg Gly Ala Gly Thr Gly Gly His 385 390 395 390 Ile Leu Asn Gln Arg Gly Gln Asp Gly Tyr Gly Lys Asp Arg Leu Gly 405 410 415 Val Gly Cys Asp Gly Met His Val Gly Gly Val Gln Ala Gln Gln Met
420 425 430 Ser Tyr His Lys His Ala Gly Gly Trp Gly Glu Tyr Gln Arg His Glu 435 440 445 Ala Pro Phe Gly Ala Ser Val Tyr Gln Gly Tyr Leu Gly Thr Arg Lys 450 455 460 Tyr Ser Asp Trp Asp Asn Ala Ser Tyr Phe Thr Asn Asp Gly Phe Glu Leu Gly Gly Pro Arg Asp Ala Leu Gly Thr Leu Asn Arg Glu Gly Leu 485 490 495 Ile Gly Tyr Glu Thr Arg Pro Trp Asn Ile Ser Leu Asn Tyr Ile Ile 510 505

Page 20

DEBE067US.txt

Lys Ile His Tyr 515

Electronic A	cknowledgement Receipt
EFS ID:	5578047
Application Number:	10583415
International Application Number:	
Confirmation Number:	6633
Title of Invention:	Endotoxin detection method
First Named Inventor/Applicant Name:	Roman MEYER
Customer Number:	32425
Filer:	Steven Lee Highlander/Richard Ortiz
Filer Authorized By:	Steven Lee Highlander
Attorney Docket Number:	DEBE:067US/ 10607189
Receipt Date:	24-JUN-2009
Filing Date:	
Time Stamp:	14:15:47
Application Type:	U.S. National Stage under 35 USC 371

Payment information:

Submitted with Payment	no
	The state of the s

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)	
1	Applicant Response to Pre-Exam Formalities Notice	DEBE067US_RESP_NOTIFICATI ON_DEF_RESP.pdf	135561 d3f8f1fc87ac6cd2751ecba5a89306102548 cecb	no	4	
Warnings:		-				

Warnings:

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	11	ıv		αı		u		

2	Sequence Listing (Text File)	DEBE067US_SUBSTITUTE_SEQ_ LISTING.txt	38575	no	0
Warnings:					
Information:					
		Total Files Size (in bytes)	1		

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111

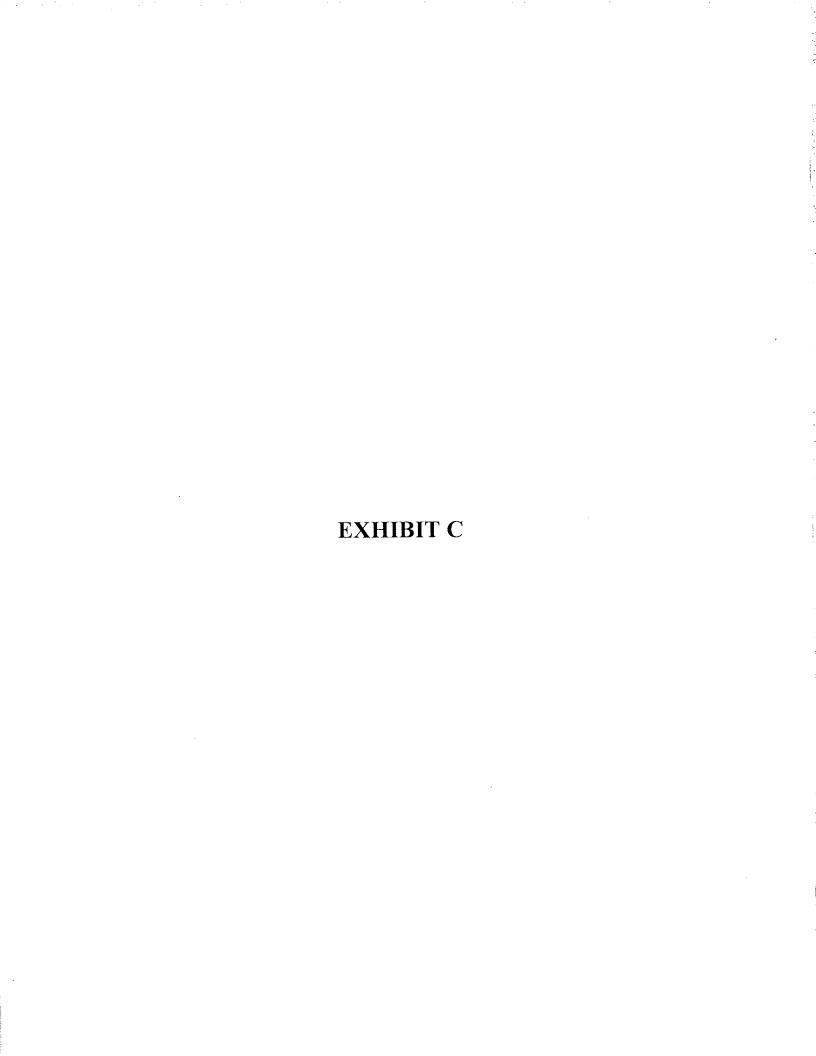
If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.





32425

SUITE 2400

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS PC Bez 1450 Alexandria, Vignia 22313-1450 www.uspto.gov

U.S. APPLICATION NUMBER NO.

FIRST NAMED APPLICANT

ATTY, DOCKET NO.

10/583.415

FULBRIGHT & JAWORSKI L.L.P.

Roman MEYER

DEBE:067US/ 10607189 INTERNATIONAL APPLICATION NO.

PCT/DE2004/002778

I.A. FILING DATE

PRIORITY DATE

12/20/2004

12/20/2003

CONFIRMATION NO. 6633 371 FORMALITIES LETTER



Date Mailed: 07/14/2009

600 CONGRESS AVE.

AUSTIN, TX 78701

NOTIFICATION OF DEFECTIVE RESPONSE

The following items have been submitted by the applicant or the IB to the United States Patent and Trademark Office as an Elected Office (37 CFR 1.495):

- Indication of Small Entity Status
- Priority Document
- Copy of the International Application filed on 06/15/2006
- English Translation of the IA filed on 06/15/2006
- Copy of the International Search Report filed on 06/15/2006
- Copy of IPE Report filed on 06/15/2006
- Preliminary Amendments filed on 06/15/2006
- Information Disclosure Statements filed on 02/13/2007
- Biochemical Sequence Diskette filed on 06/24/2009
- Oath or Declaration filed on 10/31/2008
- Biochemical Sequence Listing filed on 10/31/2008
- U.S. Basic National Fees filed on 06/15/2006
- Priority Documents filed on 06/15/2006
- Power of Attorney filed on 10/31/2008
- Non-English Language Application filed on 06/15/2006

Applicant's response filed 06/24/2009 is hereby acknowledged. The following requirements set forth in the NOTIFICATION of MISSING REQUIREMENTS mailed 09/02/2008 have not been completed.

· A copy of the "Sequence Listing" in computer readable form has been submitted. However, the content of the computer readable form does not comply with the requirements of 37 CFR 1.822 and/or 1.823, as indicated on the attached copy of the marked -up "Raw Sequence Listing." Applicant must provide a substitute computer readable form (CRF) copy of the "Sequence Listing" and a statement that the content of the sequence listing information recorded in computer readable form is identical to the written (on paper or compact disc) sequence listing and, where applicable, includes no new matter, as required by 37 CFR 1.821(e), 1.821(f), 1.821(g), 1.825(b), or 1.825(d). Refer to attachment or PAIR document dated 7/2/2009 : For questions regarding this error report, please contact Mark Spencer at (571) 272-2533 (or Anne Corrigan at (571)-272-2501)..

Applicant is required to complete the response within a time limit of ONE MONTH from the date of this Notification or within the time remaining in the response set forth in the Notification of Missing Requirements, whichever is the longer. No extension of this time limit may be granted under 37 CFR 1.136, but the period for response set in the Notification of Missing Requirements may be extended under 37 CFR 1.136(a).

Applicant is cautioned that correction of the above items may cause the specification and drawings page count to exceed 100 pages. If the specification and drawings exceed 100 pages, applicant will need to submit the required application size fee.

For questions regarding compliance to 37 CFR 1.821-1.825 requirements, please contact:

- For Rules Interpretation, call (571) 272-0951
- For Patentin Software Program Help, call Patent EBC at 1-866-217-9197 or directly at 703-305-3028 / 703-308-6845 between the hours of 6 a.m. and 12 midnight, Monday through Friday, EST.
- Send e-mail correspondence for Patentin Software Program Help @ ebc@uspto.gov

Applicant is reminded that any communications to the United States Patent and Trademark Office must be mailed to the address given in the heading and include the U.S. application no. shown above (37 CFR 1.5)

Registered users of EFS-Web may alternatively submit their reply to this notice via EFS-Web. https://sportal.uspto.gov/authenticate/AuthenticateUserLocalEPF.html

For more information about EFS-Web please call the USPTO Electronic Business Center at **1-866-217-9197** or visit our website at http://www.uspto.gov/ebc.

If you are not using EFS-Web to submit your reply, you must include a copy of this notice.

KAREN R MCLEAN

Telephone: (703) 756-1463

Sequence Listing could not be accepted due to errors.

See attached Validation Report.

If you need help call the Patent Electronic Business Center at (866) 217-9197 (toll free).

Reviewer: markspencer

Timestamp: [year=2009; month=7; day=2; hr=8; min=17; sec=5; ms=90;]

```
Reviewer Comments:
```

```
1.
```

```
E249 Order Sequence Error <211> -> <213>; Expected Mandatory
Tag: <212> in SEQID ( 9 )
E249 Order Sequence Error <211> -> <213>; Expected Mandatory
Tag: <212> in SEQID ( 10 )
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E249 Order Sequence Error <211> -> <213>; Expected Mandatory

Tag: $\langle 212 \rangle$ in SEQID (11)

E249 Order Sequence Error <211> -> <213>; Expected Mandatory

Tag: $\langle 212 \rangle$ in SEQID (12)

E249 Order Sequence Error <211> -> <213>; Expected Mandatory

Tag: <212> in SEQID (13)

E249 Order Sequence Error <211> -> <213>; Expected Mandatory

Tag: $\langle 212 \rangle$ in SEQID (14)

E249 Order Sequence Error <211> -> <213>; Expected Mandatory

Tag: <212> in SEQID (15)

E250 Structural Validation Error; Sequence listing may not be

indexable

```
<210> 9
<211> 527
<213> unknown
<220>
<223> protein p12 of T2 phage
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* * * * * * * *

For SEQ ID # 9 through 15, numeric identifier "<212> Type" is mandatory. Please insert numeric identifier <212>, with the appropriate response, between numeric identifiers <211> and <213> for each SEQ ID # 9 through

```
2.
                Artificial or Unknown found in <213> in SEQ ID (1)
W213
                Artificial or Unknown found in <213> in SEQ ID (2)
W213
                Artificial or Unknown found in <213> in SEQ ID (3)
W213
                Artificial or Unknown found in <213> in SEQ ID
W213
                Artificial or Unknown found in <213> in SEQ ID (5)
W213
                Artificial or Unknown found in <213> in SEQ ID
W213
                Artificial or Unknown found in <213> in SEQ ID
                                                                (7)
W213
                Artificial or Unknown found in <213> in SEQ ID
W213
                Artificial or Unknown found in <213> in SEQ ID (9)
W213
                Artificial or Unknown found in <213> in SEQ ID (10)
W213
                Artificial or Unknown found in <213> in SEQ ID (11)
W213
                Artificial or Unknown found in <213> in SEQ ID
                                                                (12)
W213
                Artificial or Unknown found in <213> in SEQ ID
                                                                (13)
W213
                Artificial or Unknown found in <213> in SEQ ID
                                                                (14)
W213
                Artificial or Unknown found in <213> in SEQ ID (15)
W213
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The warnings shown above are ok and require no response.

Validated By CRFValidator v 1.0.3

Application No:

10583415

Version No:

2.0

Input Set:

Output Set:

Started: 2009-06-24 14:16:41.386

Finished: 2009-06-24 14:16:43.604

Elapsed: 0 hr(s) 0 min(s) 2 sec(s) 218 ms

Total Warnings: 15

Total Errors: 8

No. of SeqIDs Defined: 15

Actual SeqID Count: 1:

Erro	or code	Error Description
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W	213	Artificial or Unknown found in <213> in SEQ ID (2)
W!	213	Artificial or Unknown found in <213> in SEQ ID (3)
W	213	Artificial or Unknown found in <213> in SEQ ID (4)
W	213	Artificial or Unknown found in <213> in SEQ ID (5)
W	213	Artificial or Unknown found in <213> in SEQ ID (6)
W	213	Artificial or Unknown found in <213> in SEQ ID (7)
W	213	Artificial or Unknown found in <213> in SEQ ID (8)
В	249	Order Sequence Error <211> -> <213>; Expected Mandatory Tag: <212> in SEQID (9)
W	213	Artificial or Unknown found in <213> in SEQ ID (9)
E	249	Order Sequence Error <211> -> <213>; Expected Mandatory Tag: <212> in SEQID (10)
W	213	Artificial or Unknown found in <213> in SEQ ID (10)
Е	249	Order Sequence Error <211> -> <213>; Expected Mandatory Tag: <212> in SEQID (11)
W	213	Artificial or Unknown found in <213> in SEQ ID (11)
F.	249	Order Sequence Error <211> -> <213>; Expected Mandatory Tag: <212> in SEQID (12)
W	213	Artificial or Unknown found in <213> in SEQ ID (12)
F	249	Order Sequence Error <211> -> <213>; Expected Mandatory Tag: <212> in SEQID (13)

Input Set:

Output Set:

Started: 2009-06-24 14:16:41.386

Finished: 2009-06-24 14:16:43.604

Elapsed: () hr(s) 0 min(s) 2 sec(s) 218 ms

Total Warnings: 15

Total Errors: 8

No. of SeqIDs Defined: 15

Actual SeqID Count: 15

Error code	Error Description
W 213	Artificial or Unknown found in <213> in SEQ ID (13)
Е 249	Order Sequence Error <211> -> <213>; Expected Mandatory Tag: <212> in SEQID (14)
w 213	Artificial or Unknown found in <213> in SEQ ID (14)
Е 249	Order Sequence Error <211> -> <213>; Expected Mandatory Tag: <212> in SEQID (15)
w 213	Artificial or Unknown found in <213> in SEQ ID (15)
E 250	Structural Validation Error; Sequence listing may not be indexable

SEQUENCE LISTING

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      SCHUTZ, MICHAEL
      GRALLERT, HOLGER
      GRASSL, RENATE
      MILLER, STEFAN
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<140> 10/583,415
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<213> artificial sequence
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<223> Synthetic primer
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                                                                     78
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<213> artificial sequence
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<223> strep tag
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                5
                                    10
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 <220>
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                                    10
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Thr Tyr Gln

<223> Synthetic primer

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<211> 19
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<213> artificial sequence
<220>
<223> strep tag
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1 5 10 15
Thr Tyr Gln
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<213> artificial sequence
<220>
<223> T4p12 with strep tag
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      20 25
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 35 40 45
Ala Ala Ile Ser Pro Ala Gly Val Asn Gly Val Pro Asp Ala Ser Ser
 50 55 60
Thr Thr Lys Gly Ile Leu Phe Leu Ala Thr Glu Gln Glu Val Ile Asp
                     75
65 70
Gly Thr Asn Asn Thr Lys Ala Val Thr Pro Ala Thr Leu Ala Thr Arg
      85 90 95
Leu Ser Tyr Pro Asn Ala Thr Glu Ala Val Tyr Gly Leu Thr Arg Tyr
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100 105 110

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Thr Pro Ala Lys Phe Thr Val Ala Leu Asn Asn Val Phe Glu Thr Arg 130 135 140

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Ann Ala Ala Thr Glu Ser Glu Gln Gly Val Ile Gln Leu Ala Thr Val 195 200205

Ala Gln Ala Arg Gln Gly Thr Leu Arg Glu Gly Tyr Ala Ile Ser Pro 210 215 220

Tyr Thr Phe Met Asn Ser Thr Ala Thr Glu Glu Tyr Lys Gly Val Ile 225 230 235 235

Lys Leu Gly Thr Gln Ser Glu Val Asn Ser Asn Asn Ala Ser Val Ala 245 250 255

Val Thr Gly Ala Thr Leu Ash Gly Arg Gly Ser Thr Thr Ser Met Arg 260 265 270

Gly Val Val Lys Leu Thr Thr Thr Ala Gly Ser Gln Ser Gly Gly Asp 275 280 285

Ala Ser Ser Ala Leu Ala Trp Asn Ala Asp Val Ile His Gln Arg Gly 290 295 300

Gly Gln Thr Ile Asn Gly Thr Leu Arg Ile Asn Asn Thr Leu Thr Ile 305 310 315 320

Ala Ser Gly Gly Ala Asn Ile Thr Gly Thr Val Asn Met Thr Gly Gly 325 330 335

Tyr Ile Gln Gly Lys Arg Val Val Thr Gln Asn Glu Ile Asp Arg Thr

340 345 350

Ile Pro Val Gly Ala Ile Met Met Trp Ala Ala Asp Ser Leu Pro Ser355360

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Arg Gly Ser His Leu Thr Asn Pro Asn Val Asn Gly Asn Asp Gln Phe 420 425 430

Gly Lys Pro Arg Leu Gly Val Gly Cys Thr Gly Gly Tyr Val Gly Glu 435 440 445

Val Gln Lys Gln Gln Met Ser Tyr His Lys His Ala Gly Gly Phe Gly 450 455 460

Glu Tyr Asp Asp Ser Gly Ala Phe Gly Asn Thr Arg Arg Ser Asn Phe 465 470 475 480

Val Gly Thr Arg Lys Gly Leu Asp Trp Asp Asn Arg Ser Tyr Phe Thr 485 490 495

Asn Asp Gly Tyr Glu Ile Asp Pro Ala Ser Gln Arg Asn Ser Arg Tyr 500 505 510

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Lys Phe Asp Pro Thr Asp Thr Asn Phe Pro Pro Glu Ile Thr Asp Val 20 25 30

Gin Ala Ala Ile Ala Ala Ile Ser Pro Ala Gly Val Asn Gly Val Pro 35 40 45

Asp Ala Ser Ser Thr Thr Lys Gly Ile Leu Phe Leu Ala Thr Glu Gln 50 55 60

Giu Val Ile Asp Gly Thr Asn Asn Thr Lys Ala Val Thr Pro Ala Thr 6b 70 75 80

Leu Ala Thr Arg Leu Ser Tyr Pro Asn Ala Thr Glu Ala Val Tyr Gly 85 90 95

Leu Thr Arg Tyr Ser Thr Asp Asp Glu Ala Ile Ala Gly Val Asn Asn 100 105 110

Glu Ser Ser Ile Thr Pro Ala Lys Phe Thr Val Ala Leu Asn Asn Val

Phe Glu Thr Arg Val Ser Thr Glu Ser Ser Asn Gly Val Ile Lys Ile 130 135 140

Ser Ser Leu Pro Gln Ala Leu Ala Gly Ala Asp Asp Thr Thr Ala Met 145 150 155 160

Thr Pro Leu Lys Thr Gln Gln Leu Ala Val Lys Leu Ile Ala Gln Ile 165 170 175

Ala Pro Ser Lys Asn Ala Ala Thr Glu Ser Glu Gln Gly Val Ile Gln 180 185 190

Leu Ala Thr Val Ala Gln Ala Arg Gln Gly Thr Leu Arg Glu Gly Tyr
195 200 205

Ala Ile Ser Pro Tyr Thr Phe Met Asn Ser Thr Ala Thr Glu Glu Tyr 210 215 220

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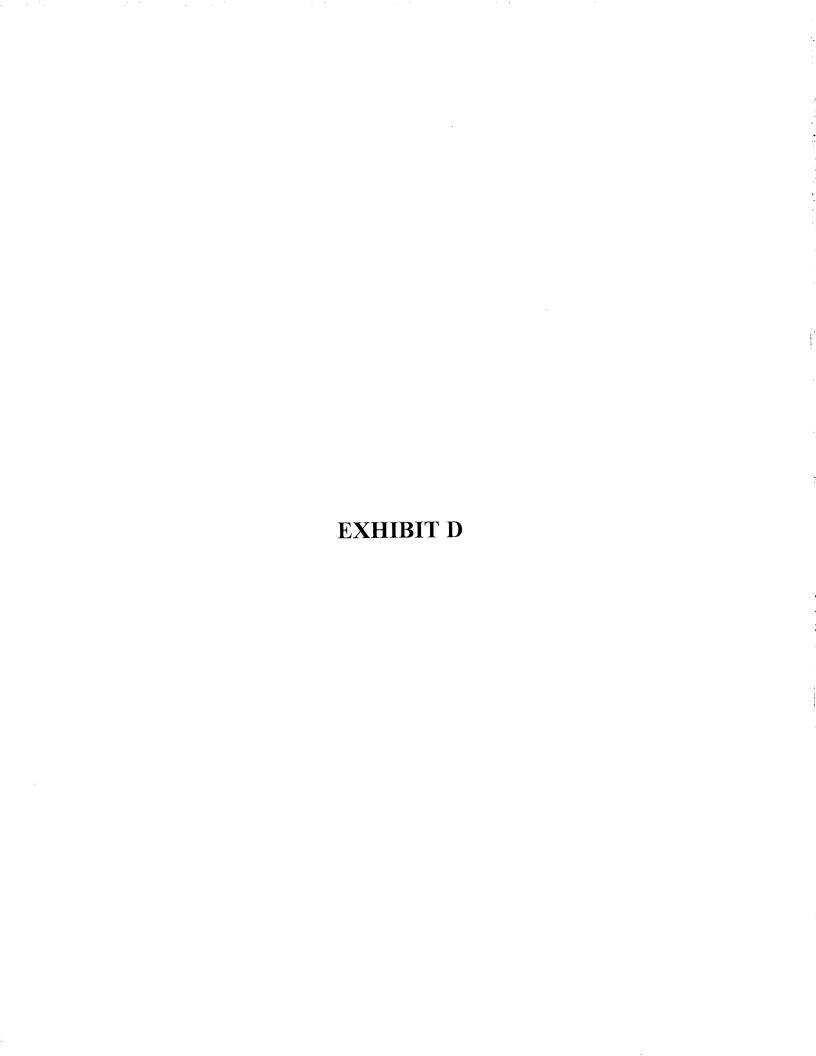
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United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.C. Box 1450 Alexandria, Vignia 22313-1450 www.uspto.gov

U.S. APPLICATION NUMBER NO.

FIRST NAMED APPLICANT

ATTY. DOCKET NO.

10/583,415

Roman MEYER

DEBE:067US/ 10607189

32425 FULBRIGHT & JAWORSKI L.L.P. 600 CONGRESS AVE. **SUITE 2400**

INTERNATIONAL APPLICATION NO. PCT/DE2004/002778

I.A. FILING DATE PRIORITY DATE 12/20/2004 12/20/2003

CONFIRMATION NO. 6633 ABANDONMENT/TERMINATION

OC000000037960477

LETTER

Date Mailed: 09/24/2009

AUSTIN, TX 78701

NOTIFICATION OF ABANDONMENT

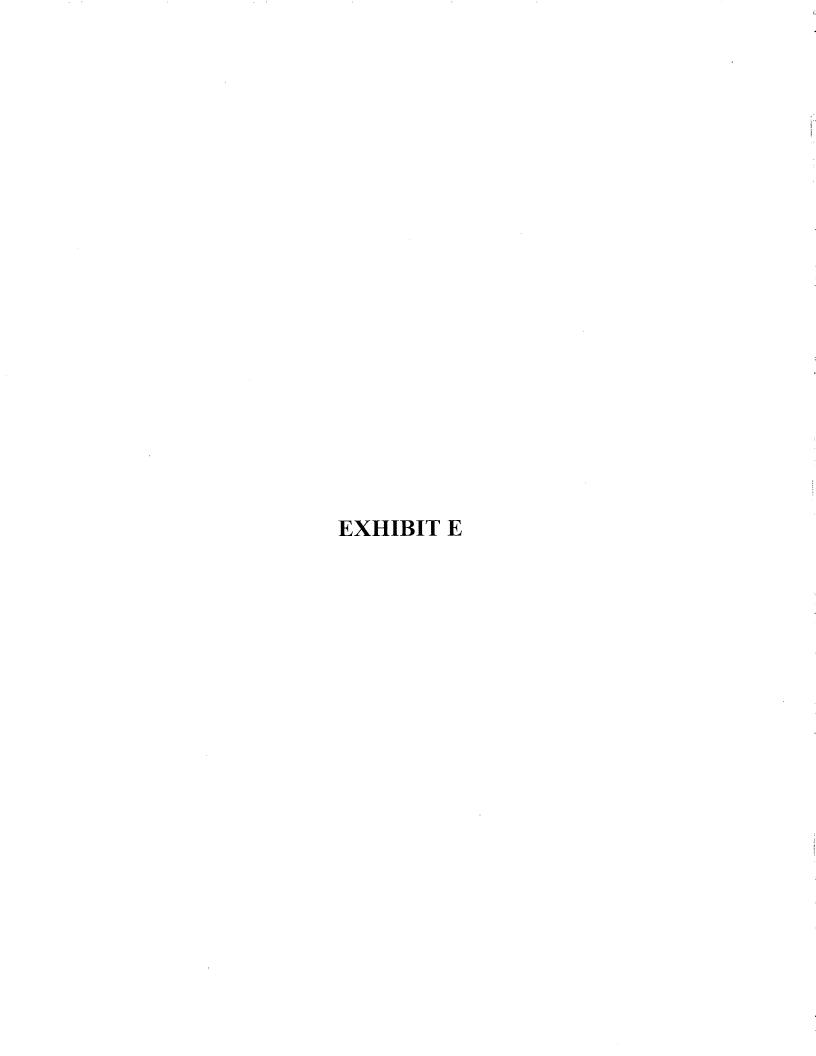
The United States Patent and Trademark Office in its capacity as a Designated / Elected Office (37 CFR 1.495) has made the following determination:

 Applicant has failed to respond to the notification of MISSING REQUIREMENTS (Form PCT/DO/EO/905), mailed 07/14/2009 within the time period set therein.

Therefore, the above identified application failed to meet the requirements of 35 U.S.C. 371 and 37 CFR 1.495 and is ABANDONED AS TO THE UNITED STATES OF AMERICA.

KAREN R MCLEAN

Telephone: (703) 756-1463



PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Roman MEYER et al.

Serial No.: 10/583,415

Filed: June 15, 2006

For: ENDOTOXIN DETECTION METHOD

Group Art Unit: 1645

Examiner: Not Yet Assigned

Atty. Dkt. No.: DEBE:067US

Confirmation No.: 6633

CERTIFICATE OF ELECTRONIC TRANSMISSION 37 C.F.R. § 1.8

I hereby certify that this correspondence is being electronically filed with the United States Patent and Trademark Office via EFS-Web of the date below:

November 13, 2009

Steven L. Highlander

PETITION UNDER 37 C.F.R. § 1.181 (A) TO WITHDRAW HOLDING OF ABANDONMENT BASED ON FAILURE TO RESPOND TO NOTIFICATION OF DEFECTIVE RESPONSE

Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

Sir:

Applicants hereby petition under 37 C.F.R. § 1.181 (a) to request withdrawal of a holding of abandonment based on failure to respond to the Notification of Defective Response, mail date July 14, 2009. On September 28, 2009, Applicants received a Notification of Abandonment based on the failure to respond to the Notification of Defective Response, mail date July 14, 2009, in the above-referenced case. However, a Notification of Defective Response was never received by Applicants' representative. According to *Delgar v. Schuyler*, 172 U.S.PQ. 513

(D.D.C. 1971) and MPEP 711.03 (c), Applicants' representative can provide a statement that fulfills the showing required to establish non-receipt of a Patent and Trademark Office communication. Such a statement is provided below.

A Notification of Abandonment was mailed on September 24, 2009 (the "Notification"). On or around September 28, 2009, the Notification was received and docketed by the docketing secretary for the law firm of Fulbright & Jaworski in Austin, Texas. The Notification was then forwarded to undersigned, the handling attorney and partner in charge for the prosecution of the present application. On September 29, 2009, the entire file of this case and docketing system was searched; attached is a declaration asserting these facts (Appendix A). A Notification of Defective Response was not found in the file. Also, a Notification of Defective Response was not docketed in this case. A copy of the executed Declaration by Deborah Hooper, Docketing Supervisor of Fulbright & Jaworski in Austin, Texas, stating that a Notification of Defective Response was never received and/or docketed for the present application is attached (Appendix B).

This office's practice with respect to communications from the Patent and Trademark Office is that communications go directly to the docketing secretary after being received in our mailroom. The docketing secretary opens the mail, dockets any deadlines necessitated by a PTO communication—including responses to Notification of Defective Response—and forwards the communication to a handling attorney or patent agent.

In view of the statement above that the Notification of Defective Response was not received by practitioners for this case and that a search of the file for the above-referenced application and of the docket confirm the non-receipt of the communication, Applicants'

representative respectfully requests the withdrawal of the holding of abandonment in this case for the failure to timely reply to the Notification of Defective Response.

This petition is believed timely filed as the Notification of Abandonment was mailed on September 24, 2009 and this petition is being filed less than two months after that date. No fee is believed due. However, if any fees is required for any reason relating to the enclosed materials the Commissioner is authorized to deduct said fees from or to Fulbright & Jaworski L.L.P. Deposit Account No. 50-1212/DEBE:067US.

Respectfully submitted,

Steven L. Highlander

Reg No. 37,642 Attorney for Applicants

FULBRIGHT & JAWORSKI L.L.P. 600 Congress Avenue, Suite 2400 Austin, Texas 78701 (512) 474-5201

Date:

November 13, 2009



PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Roman MEYER et al.

Serial No.: 10/583,415

Filed: June 15, 2006

For: ENDOTOXIN DETECTION METHOD

Group Art Unit: 1645

Examiner: Not Yet Assigned

Atty. Dkt. No.: DEBE:067US

Confirmation No.: 6633

CERTIFICATE OF ELECTRONIC TRANSMISSION 37 C.F.R. § 1.8

I hereby certify that this correspondence is being electronically filed with the United States Patent and Trademark Office via EFS-Web on indicate below:

November 13, 2009

Date

Steven Lighlander

DECLARATION OF STEVEN L. HIGHLANDER

Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

Sir:

- I, Steven L. Highlander, hereby declare:
- 1. I am the handling attorney and partner in charge for the prosecution of the above-referenced case.
- 2. I received and reviewed the Notification of Abandonment for failure to respond to the Notification of Defective Response (date mailed July 14, 2009) on September 28, 2009.
- 3. Subsequently, I reviewed the entire file for this case for a Notification of Defective Response. I did not find one.

4. I also checked our docketing system and records through one of our docketers, who confirmed that our docketing system and records did not indicate we had received a Notification of Defective Response or docketed a response deadline.

6. It is my belief that our office did not receive a Notification of Defective Response with respect to the above-referenced case.

7. I hereby declare that all statements made of my own knowledge are true and all statements made on information are believed to be true and further that the statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment or both under § 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of this application or any patent issued thereon.

Respectfully submitted,

Steven I. Highlander

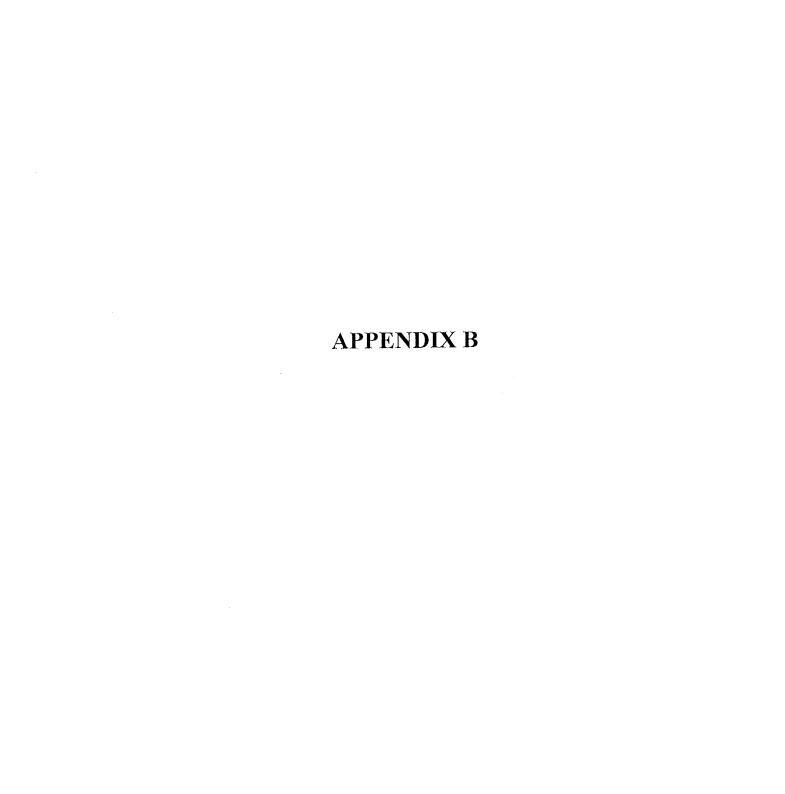
Reg. No. 37,642

Attorney for Applicants

FULBRIGHT & JAWORSKI L.L.P. 600 Congress Avenue, Suite 2400 Austin, Texas 78701 (512) 474-5201

Date:

November 13, 2009



PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Roman MEYER et al.

Serial No.: 10/583,415

Filed: June 15, 2006

For: ENDOTOXIN DETECTION METHOD

Group Art Unit: 1645

Examiner: Not Yet Assigned

Atty. Dkt. No.: DEBE:067US

Confirmation No.: 6633

CERTIFICATE OF ELECTRONIC TRANSMISSION 37 C.F.R. § 1.8

I hereby certify that this correspondence is being electronically filed with the United States Patent and Trademark Office via EFS-Web on the daily below:

November 13, 2009

Date

Steven L. Highlander

DECLARATION OF DEBORAH HOOPER UNDER 37 C.F.R 1.137(的)

Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

Sir:

- I, Deborah Hooper declare:
- 1. I am an adult resident of the State of Texas.
- 2. I am, and at all relevant times, Docketing Supervisor for Fulbright & Jaworski L.L.P., located in Austin, Texas.
- 3. I have checked the docketing records for mail received from the U.S. Patent Office between the days of July 15, 2009 and September 28, 2009.
- 4. Upon information and belief, a Notification of Defective Response for Serial Number 10/583,415, was not received by our docketing department which receives and dockets all correspondence from the U.S. Patent Office.

I declare, under penalty of perjury under the laws of the United States of America, that the foregoing is true and correct. I make the statements set forth above of my own personal knowledge, and, if called upon to do so, could testify competently thereto. I acknowledge that willful false statements and the like are punishable by fine or imprisonment, or both (18 U.S.C. §1001) and may jeopardize the validity of the patent application and any corresponding patent.

Respectfully submitted,

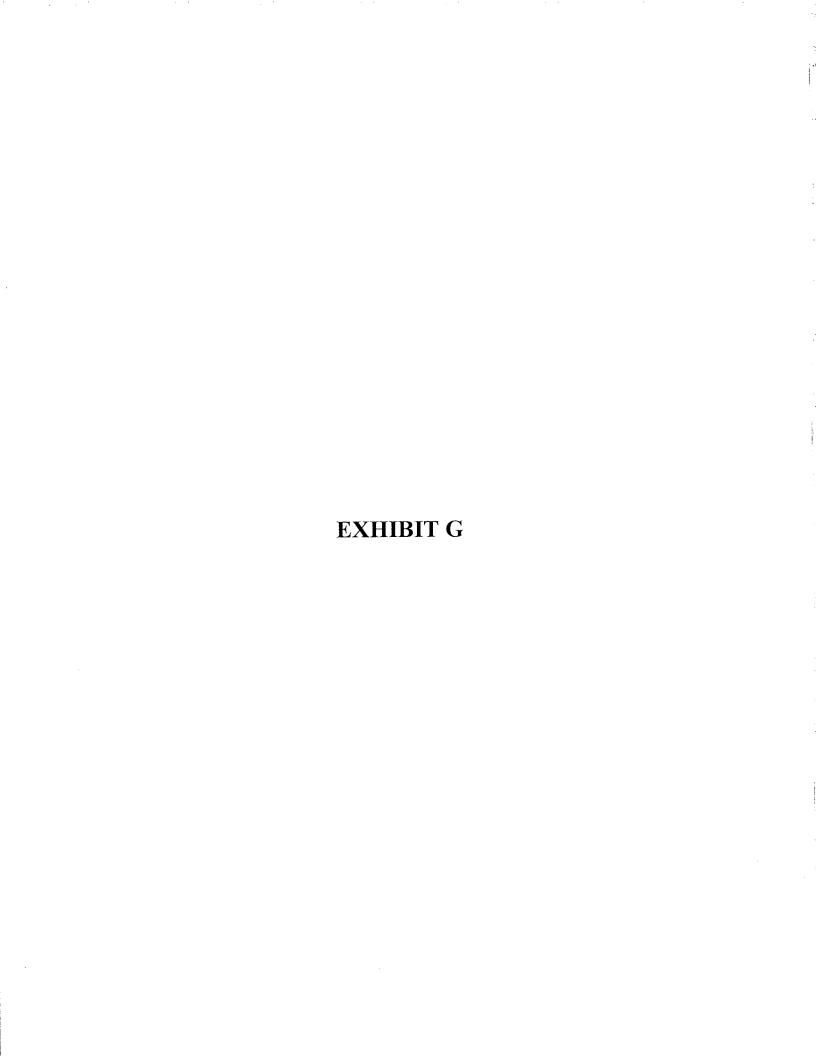
By Olloral Hooper Deborah Hooper, Docketing Supervisor

Fulbright & Jaworski, LLP

600 Congress Avenue, Suite 2400

Austin, Texas 78701 (512) 474 5201

Date: November 13, 2009



PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Roman MEYER et al.

Serial No.: 10/583,415

Filed: June 15, 2006

For: ENDOTOXIN DETECTION METHOD

Group Art Unit: 1645

Examiner: Not Yet Assigned

Atty. Dkt. No.: DEBE:067US

Confirmation No.: 6633

CERTIFICATE OF ELECTRONIC TRANSMISSION 37 C.F.R. § 1.8

I hereby certify that this correspondence is being electronically filed with the United States Patent and Trademark Office via EFS-Web on the date below:

November 13, 2009

Date

Steven Highlander

RESPONSE TO NOTIFICATION OF DEFECTIVE RESPONSE

Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

Sir:

In response to the Notification of Defective Response, dated July 14, 2009, there are enclosed herewith:

- (a) Substitute Sequence Listing in .txt format;
- (b) A Preliminary Amendment; and
- (c) A copy of Notification of Defective Response.

It is believed that no fee is due with this communication, however, should any fees under 37 C.F.R. §§ 1.16 to 1.21 be required for any reason relating to the enclosed document, the

Commissioner is authorized to deduct or credit said fees from or to Fulbright & Jaworski Deposit Account No. 50-1212/DEBE:067US.

Respectfully submitted,

Steven I. Highlander Reg. No. 37,642

Attorney for Applicants

FULBRIGHT & JAWORSKI L.L.P. 600 Congress Avenue, Suite 2400 Austin, Texas 78701 (512) 474-5201

Date:

November 13, 2009



32425

SUITE 2400

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Viggnia 22313-1450 www.usplo.gov

U.S. APPLICATION NUMBER NO.

FULBRIGHT & JAWORSKI L.L.P.

FIRST NAMED APPLICANT

ATTY. DOCKET NO.

10/583,415

Roman MEYER

DEBE:067US/ 10607189

INTERNATIONAL APPLICATION NO.

PCT/DE2004/002778

PRIORITY DATE

I.A. FILING DATE

12/20/2003

12/20/2004

CONFIRMATION NO. 6633 371 FORMALITIES LETTER



Date Mailed: 07/14/2009

600 CONGRESS AVE.

AUSTIN, TX 78701

NOTIFICATION OF DEFECTIVE RESPONSE

The following items have been submitted by the applicant or the IB to the United States Patent and Trademark Office as an Elected Office (37 CFR 1.495):

- · Indication of Small Entity Status
- · Priority Document
- Copy of the International Application filed on 06/15/2006
- English Translation of the IA filed on 06/15/2006
- Copy of the International Search Report filed on 06/15/2006
- Copy of IPE Report filed on 06/15/2006
- Preliminary Amendments filed on 06/15/2006
- Information Disclosure Statements filed on 02/13/2007
- Biochemical Sequence Diskette filed on 06/24/2009
- Oath or Declaration filed on 10/31/2008
- Biochemical Sequence Listing filed on 10/31/2008
- U.S. Basic National Fees filed on 06/15/2006
- Priority Documents filed on 06/15/2006
- Power of Attorney filed on 10/31/2008
- Non-English Language Application filed on 06/15/2006

Applicant's response filed 06/24/2009 is hereby acknowledged. The following requirements set forth in the NOTIFICATION of MISSING REQUIREMENTS mailed 09/02/2008 have not been completed.

• A copy of the "Sequence Listing" in computer readable form has been submitted. However, the content of the computer readable form does not comply with the requirements of 37 CFR 1.822 and/or 1.823, as indicated on the attached copy of the marked -up "Raw Sequence Listing." Applicant must provide a substitute computer readable form (CRF) copy of the "Sequence Listing" and a statement that the content of the sequence listing information recorded in computer readable form is identical to the written (on paper or compact disc) sequence listing and, where applicable, includes no new matter, as required by 37 CFR 1.821(e), 1.821(f), 1.821(g), 1.825(b), or 1.825(d). Refer to attachment or PAIR document dated 7/2/2009 : For questions regarding this error report, please contact Mark Spencer at (571) 272-2533 (or Anne Corrigan at (571)-272-2501)...

Applicant is required to complete the response within a time limit of ONE MONTH from the date of this Notification or within the time remaining in the response set forth in the Notification of Missing Requirements, whichever is the longer. No extension of this time limit may be granted under 37 CFR

1.136, but the period for response set in the Notification of Missing Requirements may be extended under 37 CFR 1.136(a).

Applicant is cautioned that correction of the above items may cause the specification and drawings page count to exceed 100 pages. If the specification and drawings exceed 100 pages, applicant will need to submit the required application size fee.

For questions regarding compliance to 37 CFR 1.821-1.825 requirements, please contact:

- For Rules Interpretation, call (571) 272-0951
- For Patentin Software Program Help, call Patent EBC at 1-866-217-9197 or directly at 703-305-3028 / 703-308-6845 between the hours of 6 a.m. and 12 midnight, Monday through Friday, EST.
- · Send e-mail correspondence for Patentin Software Program Help @ ebc@uspto.gov

Applicant is reminded that any communications to the United States Patent and Trademark Office must be mailed to the address given in the heading and include the U.S. application no. shown above (37 CFR 1.5)

Registered users of EFS-Web may alternatively submit their reply to this notice via EFS-Web. https://sportal.uspto.gov/authenticate/AuthenticateUserLocalEPF.html

For more information about EFS-Web please call the USPTO Electronic Business Center at 1-866-217-9197 or visit our website at http://www.uspto.gov/ebc.

If you are not using EFS-Web to submit your reply, you must include a copy of this notice.

KAREN R MCLEAN	
Telephone: (703) 756-1463	

PATENT

...Highlander

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Roman MEYER et al.

Serial No.: 10/583,415

Filed: June 15, 2006

For: ENDOTOXIN DETECTION METHOD

Group Art Unit: 1645

Examiner: Not Yet Assigned

Atty. Dkt. No.: DEBE:067US

Confirmation No.: 6633

CERTIFICATE OF ELECTRONIC TRANSMISSION

I hereby certify that this correspondence is being electronically filed with the United States Patent and Trademark Office via EFS-Web on the date below:

November 13, 2009

Date

PRELIMINARY AMENDMENT

Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

Sir:

Applicants respectfully submit this Preliminary Amendment in the above-referenced case. Consideration of this case in view of the amendments made herein is respectfully requested.

Amendments to the Specification begin on page 2.

Remarks begin on page 3.

AMENDMENT

AMENDMENTS TO THE SPECIFICATION:

Please amend the specification as follows:

Please delete the Sequence Listing and insert therefor the substitute Sequence Listing submitted as text currently herewith through EFS-Web.

REMARKS

The specification has been amended to introduce the Substitute Sequence Listing. No new matter is added by entry of this preliminary amendment.

It is believed that no fee is due with this communication, however, should any fees under 37 C.F.R. §§ 1.16 to 1.21 be required for any reason relating to the enclosed document, the Commissioner is authorized to deduct or credit said fees from or to Fulbright & Jaworski Deposit Account No. 50-1212/DEBE:067US.

The Examiner is invited to contact the undersigned attorney with any questions, comments or suggestions relating to the referenced patent application.

Respectfully submitted,

Steven Highlander

Reg. No. 37,642

Attorney for Applicants

FULBRIGHT & JAWORSKI L.L.P. 600 Congress Avenue, Suite 2400 Austin, Texas 78701 (512) 474-5201

Date:

November 13, 2009

DEBE067US.txt SEQUENCE LISTING

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Thr Pro Ala Lys Phe Thr Val Ala Leu Asn Asn Val Phe Glu Thr Arg 140

Val Ser Thr Glu Ser Ser Asn Gly Val Ile Lys Ile Ser Ser Leu Pro 145 150 155 160

Gln Ala Leu Ala Gly Ala Asp Asp Thr Thr Ala Met Thr Pro Leu Lys 165 170 175

Thr Gln Gln Leu Ala Val Lys Leu Ile Ala Gln Ile Ala Pro Ser Lys 185 Page 3

DEBE067US.txt

Asn Ala Ala Thr Glu Ser Glu Gln Gly Val Ile Gln Leu Ala Thr Val 200 Ala Gln Ala Arg Gln Gly Thr Leu Arg Glu Gly Tyr Ala Ile Ser Pro 210 215 220 Tyr Thr Phe Met Asn Ser Thr Ala Thr Glu Glu Tyr Lys Gly Val Ile 225 230 Lys Leu Gly Thr Gln Ser Glu Val Asn Ser Asn Asn Ala Ser Val Ala 245 250 255 Val Thr Gly Ala Thr Leu Asn Gly Arg Gly Ser Thr Thr Ser Met Arg 260 265 270 Gly Val Val Lys Leu Thr Thr Ala Gly Ser Gln Ser Gly Gly Asp 280 Ala Ser Ser Ala Leu Ala Trp Asn Ala Asp Val Ile His Gln Arg Gly 290 295 300 Gly Gln Thr Ile Asn Gly Thr Leu Arg Ile Asn Asn Thr Leu Thr Ile 305 310 315 320 Ala Ser Gly Gly Ala Asn Ile Thr Gly Thr Val Asn Met Thr Gly Gly 325 330 335 Tyr Ile Gln Gly Lys Arg Val Val Thr Gln Asn Glu Ile Asp Arg Thr 340 345 350 Ile Pro Val Gly Ala Ile Met Met Trp Ala Ala Asp Ser Leu Pro Ser 360 Asp Ala Trp Arg Phe Cys His Gly Gly Thr Val Ser Ala Ser Asp Cys 370 375 380 Pro Leu Tyr Ala Ser Arg Ile Gly Thr Arg Tyr Gly Gly Ser Ser Ser 385 390 395 400 400 Asn Pro Gly Leu Pro Asp Met Arg Gly Leu Phe Val Arg Gly Ser Gly Arg Gly Ser His Leu Thr Asn Pro Asn Val Asn Gly Asn Asp Gln Phe 420 Gly Lys Pro Arg Leu Gly Val Gly Cys Thr Gly Gly Tyr Val Gly Glu Page 4

Val Gln Lys Gln Gln Met Ser Tyr His Lys His Ala Gly Gly Phe Gly 450 460

440

Glu Tyr Asp Asp Ser Gly Ala Phe Gly Asn Thr Arg Arg Ser Asn Phe 465 470 475 480

Val Gly Thr Arg Lys Gly Leu Asp Trp Asp Asn Arg Ser Tyr Phe Thr 485 490 495

Asn Asp Gly Tyr Glu Ile Asp Pro Ala Ser Gln Arg Asn Ser Arg Tyr 500 505 510

Thr Leu Asn Arg Pro Glu Leu Ile Gly Asn Glu Thr Arg Pro Trp Asn 515 520 525

Ile Ser Leu Asn Tyr Ile Ile Lys Val Lys Glu 535

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Synthetic peptide <223>

Met Ser Asn Asn Thr Tyr Gln His Val Ser Asn Glu Ser Arg Tyr Val 1 5 10 15

Lys Phe Asp Pro Thr Asp Thr Asn Phe Pro Pro Glu Ile Thr Asp Val

Gln Ala Ala Ile Ala Ala Ile Ser Pro Ala Gly Val Asn Gly Val Pro 35 40 45

Asp Ala Ser Ser Thr Thr Lys Gly Ile Leu Phe Leu Ala Thr Glu Gln 50 60

Glu Val Ile Asp Gly Thr Asn Asn Thr Lys Ala Val Thr Pro Ala Thr

Leu Ala Thr Arg Leu Ser Tyr Pro Asn Ala Thr Glu Ala Val Tyr Gly

Leu Thr Arg Tyr Ser Thr Asp Asp Glu Ala Ile Ala Gly Val Asn Asn 105 Page 5

DEBE067US.txt

Glu Ser Ser Ile Thr Pro Ala Lys Phe Thr Val Ala Leu Asn Asn Val Phe Glu Thr Arg Val Ser Thr Glu Ser Ser Asn Gly Val Ile Lys Ile Ser Ser Leu Pro Gln Ala Leu Ala Gly Ala Asp Asp Thr Thr Ala Met 145 150 155 Thr Pro Leu Lys Thr Gln Gln Leu Ala Val Lys Leu Ile Ala Gln Ile Ala Pro Ser Lys Asn Ala Ala Thr Glu Ser Glu Gln Gly Val Ile Gln 180 190 Leu Ala Thr Val Ala Gln Ala Arg Gln Gly Thr Leu Arg Glu Gly Tyr 195 200 205 Ala Ile Ser Pro Tyr Thr Phe Met Asn Ser Thr Ala Thr Glu Glu Tyr Lys Gly Val Ile Lys Leu Gly Thr Gln Ser Glu Val Asn Ser Asn Asn 225 Ala Ser Val Ala Val Thr Gly Ala Thr Leu Asn Gly Arg Gly Ser Thr 245 250 255 Thr Ser Met Arg Gly Val Val Lys Leu Thr Thr Thr Ala Gly Ser Gln 260 265 270 Ser Gly Gly Asp Ala Ser Ser Ala Leu Ala Trp Asn Ala Asp Val Ile 275 280 285 His Gln Arg Gly Gly Gln Thr Ile Asn Gly Thr Leu Arg Ile Asn Asn Thr Leu Thr Ile Ala Ser Gly Gly Ala Asn Ile Thr Gly Thr Val Asn 305 310 315 320 Met Thr Gly Gly Tyr Ile Gln Gly Lys Arg Val Val Thr Gln Asn Glu 325 330 335 Ile Asp Arg Thr Ile Pro Val Gly Ala Ile Met Met Trp Ala Ala Asp 340 345 350 Ser Leu Pro Ser Asp Ala Trp Arg Phe Cys His Gly Gly Thr Val Ser Page 6

365

Ala Ser Asp Cys Pro Leu Tyr Ala Ser Arg Ile Gly Thr Arg Tyr Gly 370 380

360

Gly Thr Ser Ser Asn Pro Gly Leu Pro Asp Met Arg Gly Leu Phe Val 390

Arg Gly Ser Gly Arg Gly Ser His Leu Thr Asn Pro Asn Val Asn Gly 405 410 415

Asn Asp Gln Phe Gly Lys Pro Arg Leu Gly Val Gly Cys Thr Gly Gly

Tyr Val Gly Glu Val Gln Lys Gln Gln Met Ser Tyr His Lys His Ala 435 440 445

Gly Gly Phe Gly Glu Tyr Asp Asp Ser Gly Ala Phe Gly Asn Thr Arg $450 \hspace{1.5cm} 455 \hspace{1.5cm} 460$

Arg Ser Asn Phe Val Gly Thr Arg Lys Gly Leu Asp Trp Asp Asn Arg 465 470

Ser Tyr Phe Thr Asn Asp Gly Tyr Glu Ile Asp Pro Ala Ser Gln Arg

Asn Ser Arg Tyr Thr Leu Asn Arg Pro Glu Leu Ile Gly Asn Glu Thr 500

Arg Pro Trp Asn Ile Ser Leu Asn Tyr Ile Ile Lys Val Lys Glu 520

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<213> artificial sequence

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Lys Phe Asp Pro Thr Asp Thr Asn Phe Pro Pro Glu Ile Thr Asp Val

His Ala Ala Ile Ala Ala Ile Ser Pro Ala Gly Val Asn Gly Val Pro Page 7

DEBE067US.txt

Asp Ala Ser Ser Thr Thr Lys Gly Ile Leu Phe Ile Pro Thr Glu Gln 50 60 Glu Val Ile Asp Gly Thr Asn Asn Thr Lys Ala Val Thr Pro Ala Thr 65 70 75 80 Leu Ala Thr Arg Leu Ser Tyr Pro Asn Ala Thr Glu Thr Val Tyr Gly 85 90 95 Leu Thr Arg Tyr Ser Thr Asn Asp Glu Ala Ile Ala Gly Val Asn Asn 100 105 110 Glu Ser Ser Ile Thr Pro Ala Lys Phe Thr Val Ala Leu Asn Asn Ala 115 120 125 Phe Glu Thr Arg Val Ser Thr Glu Ser Ser Asn Gly Val Ile Lys Ile 130 135 140 Ser Ser Leu Pro Gln Ala Leu Ala Gly Ala Asp Asp Thr Thr Ala Met 145 150 155 160 Thr Pro Leu Lys Thr Gln Gln Leu Ala Ile Lys Leu Ile Ala Gln Ile 165 170 175 Ala Pro Ser Glu Thr Thr Ala Thr Glu Ser Asp Gln Gly Val Val Gln 180 185 190 Leu Ala Thr Val Ala Gln Val Arg Gln Gly Thr Leu Arg Glu Gly Tyr 195 200 205 Ala Ile Ser Pro Tyr Thr Phe Met Asn Ser Ser Ser Thr Glu Glu Tyr 210 215 220 Lys Gly Val Ile Lys Leu Gly Thr Gln Ser Glu Val Asn Ser Asn Asn 225 230 235 Ala Ser Val Ala Val Thr Gly Ala Thr Leu Asn Gly Arg Gly Ser Thr 245 250 255 Thr Ser Met Arg Gly Val Val Lys Leu Thr Thr Ala Gly Ser Gln 260 265 270 Ser Gly Gly Asp Ala Ser Ser Ala Leu Ala Trp Asn Ala Asp Val Ile 275 280 285 Gln Gln Arg Gly Gly Gln Ile Ile Tyr Gly Thr Leu Arg Ile Glu Asp Page 8

Thr Phe Thr Ile Ala Asn Gly Gly Ala Asn Ile Thr Gly Thr Val Arg 305 310 315 320

Met Thr Gly Gly Tyr Ile Gln Gly Asn Arg Ile Val Thr Gln Asn Glu 325 330 335

Ile Asp Arg Thr Ile Pro Val Gly Ala Ile Met Met Trp Ala Ala Asp 340 345 350

Ser Leu Pro Ser Asp Ala Trp Arg Phe Cys His Gly Gly Thr Val Ser 355 360 365

Ala Ser Asp Cys Pro Leu Tyr Ala Ser Arg Ile Gly Thr Arg Tyr Gly 370 375 380

Gly Asn Pro Ser Asn Pro Gly Leu Pro Asp Met Arg Gly Leu Phe Val 385 390 395 400

Arg Gly Ser Gly Arg Gly Ser His Leu Thr Asn Pro Asn Val Asn Gly 405 410 415

Asn Asp Gln Phe Gly Lys Pro Arg Leu Gly Val Gly Cys Thr Gly Gly 420 425 430

Tyr Val Gly Glu Val Gln Ile Gln Gln Met Ser Tyr His Lys His Ala 435 440 445

Gly Gly Phe Gly Glu His Asp Asp Leu Gly Ala Phe Gly Asn Thr Arg 450 455 460

Arg Ser Asn Phe Val Gly Thr Arg Lys Gly Leu Asp Trp Asp Asn Arg 465 470 475 480

Ser Tyr Phe Thr Asn Asp Gly Tyr Glu Ile Asp Pro Glu Ser Gln Arg 485 490 495

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<210> 11 <211> 518

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Gln Ser Ala Leu Ser Lys Ile Ser Asn Ile Gly Val Asn Gly Ile Pro 35 40 45

Asp Ala Ser Met Glu Val Lys Gly Ile Ala Met Ile Ala Ser Glu Gln 50 60

Glu Val Leu Asp Gly Thr Asn Asn Ser Lys Ile Val Thr Pro Ala Thr 65 70 75 80

Leu Ala Thr Arg Leu Leu Tyr Pro Asn Ala Thr Glu Thr Lys Tyr Gly 85 90 95

Leu Thr Arg Tyr Ser Thr Asn Glu Glu Thr Leu Glu Gly Ser Asp Asn 100 105

Asn Ser Ser Ile Thr Pro Gln Lys Leu Lys Tyr His Thr Asp Asp Val 115 120 125

Phe Gln Asn Arg Tyr Ser Ser Glu Ser Ser Asn Gly Val Ile Lys Ile 130 135 140

Ser Ser Thr Pro Ala Ala Leu Ala Gly Val Asp Asp Thr Thr Ala Met 145 150 155 160

Thr Pro Leu Lys Thr Gln Lys Leu Ala Ile Lys Leu Ile Ser Gln Ile 165 170 175

Ala Pro Ser Glu Asp Thr Ala Ser Glu Ser Val Arg Gly Val Val Gln 180 185 190

Leu Ser Thr Val Ala Gln Thr Arg Gln Gly Thr Leu Arg Glu Gly Tyr 195 200 205

Ala Ile Ser Pro Tyr Thr Phe Met Asn Ser Val Ala Thr Gln Glu Tyr 210 215 220

Lys Gly Val Ile Arg Leu Gly Thr Gln Ser Glu Ile Asn Ser Asn Leu Page 10 Gly Asp Val Ala Val Thr Gly Glu Thr Leu Asn Gly Arg Gly Ala Thr 245 250 255 245

230

Gly Ser Met Arg Gly Val Val Lys Leu Thr Thr Gln Ala Gly Ile Ala 260 265 270

Pro Glu Gly Asp Ser Ser Gly Ala Leu Ala Trp Asn Ala Asp Val Ile 275 280 285

Asn Thr Arg Gly Gly Gln Thr Ile Asn Gly Ser Leu Asn Leu Asp His 290 295 300

Leu Thr Ala Asn Gly Ile Trp Ser Arg Gly Gly Met Trp Lys Asn Gly 305 310 315

Asp Gln Pro Val Ala Thr Glu Arg Tyr Ala Ser Glu Arg Val Pro Val 325 330 335

Gly Thr Ile Met Met Phe Ala Gly Asp Ser Ala Pro Pro Gly Trp Ile 340 345 350

Met Cys His Gly Gly Thr Val Ser Gly Asp Gln Tyr Pro Asp Tyr Arg 355 360 365

Asn Thr Val Gly Thr Arg Phe Gly Gly Asp Trp Asn Asn Pro Gly Ile 370 375 380

Pro Asp Met Arg Gly Leu Phe Val Arg Gly Ala Gly Thr Gly Gly His 385 390 395

Ile Leu Asn Gln Arg Gly Gln Asp Gly Tyr Gly Lys Asp Arg Leu Gly 405 410 415

Val Gly Cys Asp Gly Met His Val Gly Gly Val Gln Ala Gln Gln Ile 420 425 430

Ser Tyr His Lys His Ala Gly Ala Trp Gly Glu Asn Gly Asn Asn Arg 435 440 445

Gly Tyr Ala Pro Phe Gly Ala Ser Asn Gly Ser Gly Tyr Leu Gly Asn 450 455 460

Gly Arg Ser Ala Asp Trp Asp Asn His Leu Phe Phe Thr Asn Asp Gly 465 470 475 480

Phe Glu Met Gly Gly Pro Arg Asp Ser Phe Gly Thr Leu Asn Arg Glu 485 490 495

Gly Leu Ile Gly Tyr Glu Thr Arg Pro Trp Asn Ile Ser Leu Asn Tyr 500 505 510

Ile Ile Lys Ile His Tyr 515

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Gln Ala Ala Leu Ala Ser Ile Ser Ala Tyr Gly Val Lys Gly Val Pro 35 40 45

Asp Ala Ser Glu Ala Glu Lys Gly Val Ile Gln Leu Ala Thr Glu Gln 50 55 60

Glu Val Leu Asp Gly Phe Asn Ser Thr Lys Ala Val Thr Pro Ala Thr 65 70 75 80

Leu Asn Ala Arg Leu Gln Tyr Pro Asn Ala Ser Glu Thr Gln Tyr Gly 85 90 95

val Thr Lys Tyr Ala Thr Gln Glu Glu Ala Ile Ala Gly Thr Leu Asp 100 105 110

Thr Val Ser Ile Thr Pro Leu Lys Leu Asn Gln Thr Ile Asp Asn Thr 115 120 125

Phe Ser Thr Arg Tyr Ser Thr Glu Thr Thr Asn Gly Val Ile Lys Ile 130 135 140

Ala Thr Gln Thr Ala Ala Leu Ala Gly Ser Asp Asp Thr Thr Ala Met 145 150 155 160

Thr Pro Leu Lys Thr Gln Gln Leu Ala Ile Lys Leu Ile Ser Gln Ile Page 12 Ala Pro Asn Asn Asp Pro Ala Ser Glu Ser Ile Thr Gly Val Val Arg
Leu Ala Thr Val Ala Gln Thr Arg Gln Gly Thr Leu Arg 205 Glu Gly Tyr
Ala Ile Ser Pro Tyr Thr Phe Met Asn Ser Val Ala Thr Gln Glu Tyr

Lys Gly Val Ile Arg Leu Gly Thr Gln Ala Glu Ile Asn Ser Asn Leu 225 230 235 240

Gly Asp Val Ala Val Thr Gly Glu Thr Leu Asn Gly Arg Gly Ala Thr 245 250 255

Gly Ser Met Arg Gly Val Val Lys Leu Thr Thr Gln Ala Gly Val Ala 260 265 270

Pro Glu Gly Asp Ser Ser Gly Ala Leu Ala Trp Asn Ala Asp Val Ile 275 280 285

Asn Thr Arg Gly Gly Gln Thr Ile Asn Gly Ser Leu Asn Leu Asp His 290 295 300

Leu Thr Ala Asn Gly Ile Trp Ser Arg Gly Gly Met Trp Lys Asn Gly 305 310 315

Asp Gln Pro Val Ala Thr Glu Arg Tyr Ala Ser Glu Arg Val Pro Val 325 330 335

Gly Thr Ile Gln Met Phe Ala Gly Asp Ser Ala Pro Pro Gly Trp Val 340 345 350

Leu Cys His Gly Gly Thr Ile Ser Gly Asp Gln Phe Pro Asp Tyr Arg 355 360 365

Asn Val Val Gly Thr Arg Phe Gly Gly Asp Trp Asn Asn Pro Gly Ile 370 375 380

Pro Asp Met Arg Gly Leu Phe Val Arg Gly Ala Gly Thr Gly Ser His 385 390 395 400

Ile Leu Asn Asn Arg Gly Gln Asp Gly Tyr Gly Lys Asp Arg Leu Gly 405 410 415

Val Gly Cys Asp Gly Met His Val Gly Gly Val Gln Ala Gln Gln Met 420 425 430

Ser Tyr His Lys His Ala Gly Gly Trp Gly Glu Phe Gln Arg His Glu 435 440 445

Ala Pro Phe Gly Ala Ser Val Tyr Gln Gly Tyr Leu Gly Thr Arg Lys 450 455 460

Tyr Ser Asp Trp Asp Asn Ala Ser Tyr Phe Thr Asn Asp Gly Phe Glu 465 470 475 480

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Asp Ala Thr Met Glu Val Lys Gly Ile Ala Met Ile Ala Ser Glu Gln 50 60

Glu Val Leu Asp Gly Thr Asn Asn Ser Lys Ile Val Thr Pro Ala Thr 65 70 75 80

Leu Ala Thr Arg Leu Leu Tyr Pro Asn Ala Thr Glu Thr Lys Tyr Gly
85 90 95

Leu Thr Arg Tyr Ser Thr Asn Glu Glu Thr Leu Glu Gly Ser Asp Asn Page 14

100 Asn Ser Ser Ile Thr Pro Gln Lys Leu Lys Tyr His Thr Asp Asp Val 115 120 125 Phe Gln Asn Arg Tyr Ser Ser Glu Ser Ser Asn Gly Val Ile Lys Ile 130 135 140 Ser Ser Thr Pro Ala Ala Leu Ala Gly Val Asp Asp Thr Thr Ala Met 145 150 155 160 Thr Pro Leu Lys Thr Gln Lys Leu Ala Ile Lys Leu Ile Ser Gln Ile 165 170 175 Ala Pro Ser Glu Asp Thr Ala Ser Glu Ser Val Arg Gly Val Val Gln Leu Ser Thr Val Ala Gln Thr Arg Gln Gly Thr Leu Arg Glu Gly Tyr Ala Ile Ser Pro Tyr Thr Phe Met Asn Ser Val Ala Thr Gln Glu Tyr Lys Gly Val Ile Arg Leu Gly Thr Gln Ser Glu Ile Asn Ser Asn Leu 225 230 235 240 Gly Asp Val Ala Val Thr Gly Gly Thr Leu Asn Gly Arg Gly Ala Thr Gly Ser Met Arg Gly Val Val Lys Leu Thr Thr Gln Ala Gly Ile Ala 260 265 270 Pro Glu Gly Asp Ser Ser Gly Ala Leu Ala Trp Asn Ala Asp Val Ile 275 280 285 Asn Thr Arg Gly Gly Gln Thr Ile Asn Gly Ser Leu Asn Leu Asp His 300 Leu Thr Ala Asn Gly Ile Trp Ser Arg Gly Gly Met Trp Lys Asn Gly 305 310 315 Asp Gln Pro Val Ala Thr Glu Arg Tyr Ala Ser Glu Arg Val Pro Val 325 330 335 Gly Thr Ile Met Met Phe Ala Gly Asp Ser Ala Pro Pro Gly Trp Ile 340 345 350 DEBE067US.txt

Met Cys His Gly Gly Thr Val Ser Gly Asp Gln Tyr Pro Asp Tyr Arg 355 360 365

Asn Thr Val Gly Thr Arg Phe Gly Gly Asp Trp Asn Asn Pro Gly Ile 370 375 380

Pro Asp Met Arg Gly Leu Phe Val Arg Gly Ala Gly Thr Gly Gly His 385 390 395 400

Ile Leu Asn Gln Arg Gly Gln Asp Gly Tyr Gly Lys Asp Arg Leu Gly 405 410 415

Val Gly Cys Asp Gly Met His Val Gly Gly Val Gln Ala Gln Gln Met 420 425 430

Ser Tyr His Lys His Ala Gly Gly Trp Gly Glu Tyr Asn Arg Ser Glu 435 440 445

Gly Pro Phe Gly Ala Ser Val Tyr Gln Gly Tyr Leu Gly Thr Arg Lys 450 455 460

Tyr Ser Asp Trp Asp Asn Ala Ser Tyr Phe Thr Asn Asp Gly Phe Glu 465 470 475 480

Leu Gly Gly Pro Arg Asp Ala Leu Gly Thr Leu Asn Arg Glu Gly Leu 485 490 495

Ile Gly Tyr Glu Thr Arg Pro Trp Asn Ile Ser Leu Asn Tyr Ile Ile 500 505 510

Lys Ile His Tyr 515

<210> 14 <211> 527

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Lys Phe Asp Pro Thr Asp Thr Asn Phe Pro Pro Glu Ile Thr Asp Val 20 25 30

Gln Ala Ala Ile Ala Ala Ile Ser Pro Ala Gly Val Asn Gly Val Pro Page 16 40

Asp Ala Ser Ser Thr Thr Lys Gly Ile Leu Phe Leu Ala Thr Glu Gln 50 60 Glu Val Ile Asp Gly Thr Asn Asn Thr Lys Ala Val Thr Pro Ala Thr 65 70 75 80 Leu Ala Thr Arg Leu Ser Tyr Pro Asn Ala Thr Glu Thr Val Tyr Gly 85 90 95 Leu Thr Arg Tyr Ser Thr Asn Asp Glu Ala Ile Ala Gly Val Asn Asn 100 105 110 Glu Ser Ser Ile Thr Pro Ala Lys Phe Thr Val Ala Leu Asn Asn Ala 115 120 125 Phe Glu Thr Arg Val Ser Thr Glu Ser Ser Asn Gly Val Ile Lys Ile 130 135 140 Ser Ser Leu Pro Gln Ala Leu Ala Gly Ala Asp Asp Thr Thr Ala Met 145 150 155 160 Thr Pro Leu Lys Thr Gln Gln Leu Ala Ile Lys Leu Ile Ala Gln Ile Ala Pro Ser Glu Thr Thr Ala Thr Glu Ser Asp Gln Gly Val Val Gln 180 185 190 Leu Ala Thr Val Ala Gln Val Arg Gln Gly Thr Leu Arg Glu Gly Tyr 195 200 205 Ala Ile Ser Pro Tyr Thr Phe Met Asn Ser Ser Ala Thr Glu Glu Tyr 210 215 220 Lys Gly Val Ile Lys Leu Gly Thr Gln Ser Glu Val Asn Ser Asn Asn 225 230 235 Ala Ser Val Ala Val Thr Gly Ala Thr Leu Asn Gly Arg Gly Ser Thr 245 250 255 Thr Ser Met Arg Gly Val Val Arg Leu Thr Thr Thr Ala Gly Ser Gln 260 265 270 Ser Gly Gly Asp Ala Ser Ser Ala Leu Ala Trp Asn Ala Asp Val Ile 275 280 285 DEBE067US.txt

His Gln Arg Gly Gln Thr Ile Asn Gly Thr Leu Arg Ile Asn Asn 290 295 300

Thr Leu Thr Ile Ala Ser Gly Gly Ala Asn Ile Thr Gly Thr Val Asn 305 310 315

Met Thr Gly Gly Tyr Ile Gln Gly Lys Arg Val Val Thr Gln Asn Glu 325 330 335

Ile Asp Arg Thr Ile Pro Val Gly Ala Ile Met Met Trp Ala Ala Asp 340 345

Ser Leu Pro Ser Asp Ala Trp Arg Phe Cys His Gly Gly Thr Val Ser 355 360 365

Ala Ser Asp Cys Pro Leu Tyr Ala Ser Arg Ile Gly Thr Arg Tyr Gly 370 380

Gly Ser Ser Ser Asn Pro Gly Leu Pro Asp Met Arg Gly Leu Phe Val 385 390 400

Arg Gly Ser Gly Arg Gly Ser His Leu Thr Asn Pro Asn Val Asn Gly 405 410 415

Asn Asp Gln Phe Gly Lys Pro Arg Leu Gly Val Gly Cys Thr Gly Gly 420 425 430

Tyr Val Gly Glu Val Gln Lys Gln Gln Met Ser Tyr His Lys His Ala 435 440 445

Gly Gly Phe Gly Glu Trp Asp Asp Ser Gly Ala Phe Gly Asn Thr Arg 450 455 460

Arg Ser Asn Phe Val Gly Thr Arg Lys Gly Leu Asp Trp Asp Asn Arg 465 470 475

Ser Tyr Phe Thr Asn Asp Gly Tyr Glu Ile Asp Pro Ala Ser Gln Arg 485 490 495

Asn Ser Arg Tyr Thr Leu Asn Arg Pro Glu Leu Ile Gly Asn Glu Thr 500 510

Arg Pro Trp Asn Ile Ser Leu Asn Tyr Ile Ile Lys Val Lys Glu 515 520 525

<210> 15 <211> 516 <212> PRT

<213> artificial sequence

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Lys Phe Asp Pro Val Gly Ser Asn Phe Pro Asp Thr Val Thr Thr Val 20 25 30

Gln Ser Ala Leu Ser Lys Ile Ser Asn Ile Gly Val Asn Gly Ile Pro 35 40 45

Asp Ala Thr Met Glu Val Lys Gly Ile Ala Met Ile Ala Ser Glu Gln 50 60

Glu Val Leu Asp Gly Thr Asn Asn Ser Lys Ile Val Thr Pro Ala Thr 65 70 75 80

Leu Ala Thr Arg Leu Leu Tyr Pro Asn Ala Thr Glu Thr Lys Tyr Gly 85 90 95

Leu Thr Arg Tyr Ser Thr Asn Glu Glu Thr Leu Glu Gly Ser Asp Asn 100 105 110

Asn Ser Ser Ile Thr Pro Gln Lys Leu Lys Tyr His Thr Asp Asp Val 115 120 125

Phe Gln Asn Arg Tyr Ser Ser Glu Ser Ser Asn Gly Val Ile Lys Ile 130 135 140

Ser Ser Thr Pro Ala Ala Leu Ala Gly Val Asp Asp Thr Thr Ala Met 145 150 160

Thr Pro Leu Lys Thr Gln Lys Leu Ala Ile Lys Leu Ile Ser Gln Ile 165 170 175

Ala Pro Ser Glu Asp Thr Ala Ser Glu Ser Val Arg Gly Val Val Gln
180 185 190

Leu Ser Thr Val Ala Gln Thr Arg Gln Gly Thr Leu Arg Glu Gly Tyr 195 200 205

Ala Ile Ser Pro Tyr Thr Phe Met Asn Ser Val Ala Thr Gln Glu Tyr 210 215 220

Lys Gly Val Ile Arg Leu Gly Thr Gln Ser Glu Ile Asn Ser Asn Leu 225 230

Gly Asp Val Ala Val Thr Gly Glu Thr Leu Asn Gly Arg Gly Ala Thr 245 250 255

Ser Ser Met Arg Gly Val Val Lys Leu Thr Thr Gln Ala Gly Ile Ala 260 265 270

Pro Glu Gly Asp Gly Ser Gly Ala Leu Ala Trp Asn Ala Asp Val Ile 275 280 285

Asn Thr Arg Gly Gly Gln Thr Ile Asn Gly Ser Leu Asn Leu Asp His

Leu Thr Ala Asn Gly Ile Trp Ser Arg Gly Gly Met Trp Lys Asn Gly 305 310 315

Asp Gln Pro Val Ala Thr Glu Arg Tyr Ala Ser Glu Arg Val Pro Val

Gly Thr Ile Met Met Phe Ala Gly Asp Ser Ala Pro Pro Gly Trp Ile 340 345 350

Met Cys His Gly Gly Thr Val Ser Gly Asp Gln Tyr Pro Asp Tyr Arg 355 360 365

Asn Thr Val Gly Ala Arg Phe Gly Gly Asp Trp Asn Asn Pro Gly Ile 370 375 380

Pro Asp Met Arg Gly Leu Phe Val Arg Gly Ala Gly Thr Gly Gly His 385 390 395 400

Ile Leu Asn Gln Arg Gly Gln Asp Gly Tyr Gly Lys Asp Arg Leu Gly $405 \hspace{1cm} 410 \hspace{1cm} 415$

val Gly Cys Asp Gly Met His Val Gly Gly Val Gln Ala Gln Gln Met 420 425 430

Ser Tyr His Lys His Ala Gly Gly Trp Gly Glu Tyr Gln Arg His Glu 435 440 445

Ala Pro Phe Gly Ala Ser Val Tyr Gln Gly Tyr Leu Gly Thr Arg Lys

Tyr Ser Asp Trp Asp Asn Ala Ser Tyr Phe Thr Asn Asp Gly Phe Glu 465 470 475

DEBE067US.txt

Leu Gly Gly Pro Arg Asp Ala Leu Gly Thr Leu Asn Arg Glu Gly Leu 485 490 495

Ile Gly Tyr Glu Thr Arg Pro Trp Asn Ile Ser Leu Asn Tyr Ile Ile 500 505

Lys Ile His Tyr 515

Electronic A	cknowledgement Receipt
EFS ID:	6446667
Application Number:	10583415
International Application Number:	
Confirmation Number:	6633
Title of Invention:	Endotoxin detection method
First Named Inventor/Applicant Name:	Roman MEYER
Customer Number:	32425
Filer:	Steven Lee Highlander/Richard Ortiz
Filer Authorized By:	Steven Lee Highlander
Attorney Docket Number:	DEBE:067US/ 10607189
Receipt Date:	13-NOV-2009
Filing Date:	
Time Stamp:	09:14:04
Application Type:	U.S. National Stage under 35 USC 371

Payment information:

Submitted with Payment	no

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Petition for review by the Office of Petitions.	DEBE067US_PETITION_WITHDR AW_ABN.pdf	210418 eb6f827818b815402a283827763cfc651ee4 30a0	no	9

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	Inf	orm	atio	n:
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2	Applicant Response to Pre-Exam	140433	no	4									
2	Formalities Notice	FECTIVE_RESP.pdf	3c8e7f4a42eda18d6803d72d123af73928e ac1c2										
Warnings:													
Information:													
3		DEBE067US_PRELIM_AMNDT.											
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Information													
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This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

#### New Applications Under 35 U.S.C. 111

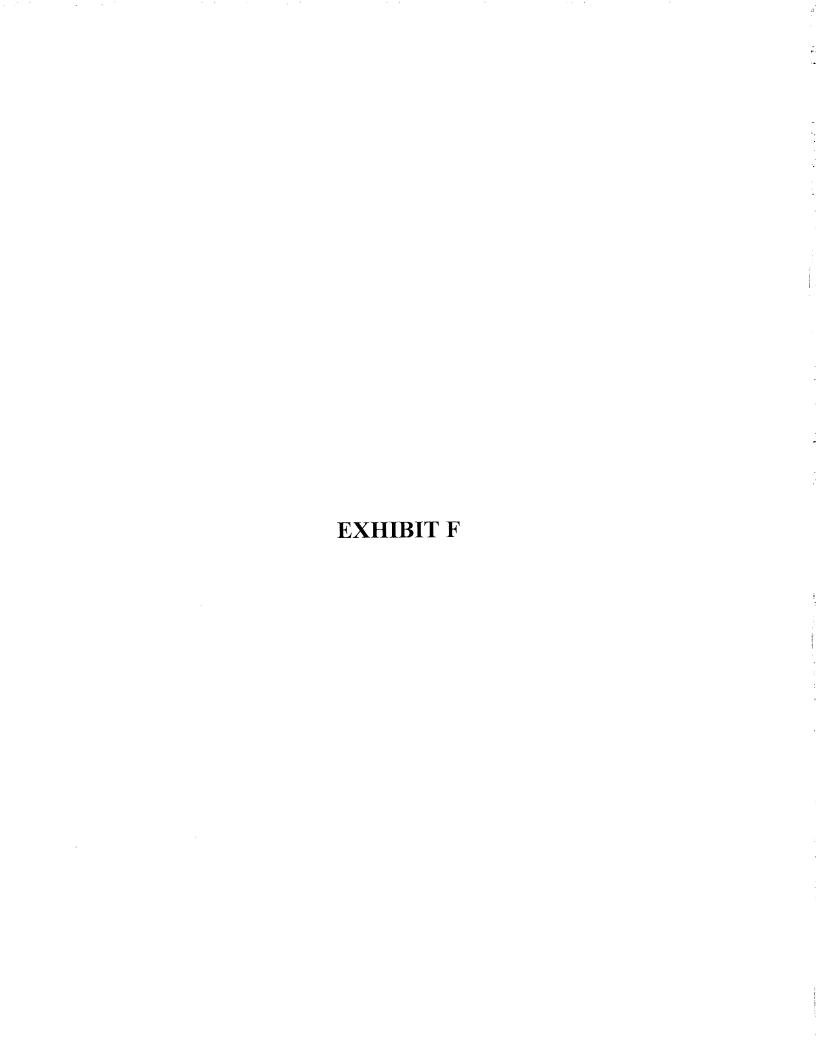
If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

## National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

# New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.





Commissioner for Patents United States Patent and Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450 www.usplo.gov

STEVEN L. HIGHLANDER FULBRIGHT & JAWORSKI L.L.P. 600 CONGRESS AVE. SUITE 2400 AUSTIN, TX 78701

In re Application of:

MEYER, ROMAN et al

**DECISION** 

Application No.: 10/583,415

PCT Application No.: PCT/DE2004/002778

Int. Filing Date: 20 December 2004

: UNDER

Priority Date: 20 December 2003

Atty Docket No.: DEBE:067US

For: ENDOTOXIN DETECTION METHOD

37 CFR § 1.181

This is in response to applicants' "Petition Under 37 C.F.R. 1.181(A) to Withdraw Holding of Abandonment Based on Failure to Respond to Notification of Defective Response" filed on 13 November 2009. No petition fee is required.

# **BACKGROUND**

On 20 December 2004, applicants submitted international application PCT/DE2004/002778, which claimed priority to a prior application filed 20 December 2003.

On 15 June 2006, applicants filed a submission for entry into the national stage in the United States, which was accompanied by, inter alia, a preliminary amendment to the specification and the claims. The papers were assigned U.S. application number 10/583,415.

On 02 September 2008, The United States national stage office (DO/EO/US) mailed a "NOTIFICATION OF MISSING REQUIREMENTS UNDER 35 U.S.C. 371 IN THE UNITED STATES DESIGNATED/ELECTED OFFICE (Form DO/EO/905) informing applicants of the need to provide a signed oath or declaration of the inventors, in compliance with 37 CFR 1.497(a) and (b), identifying the application by the international application number and international filing date. The notification also requires a sequence listing in computer readable form.

On 31 October 2008, applicants filed a response to the Notification. The response included a transmittal letter, substitute sequence listing in .txt format, and an executed declaration.

On 02 June 2009, the DO/EO/US mailed a Notification of Defective Response (Form PCT/DO/EO/916) indicating the sequence listing was defective.

On 24 June 2009, applicants filed a response to the Notification. The response included another copy of the sequence listing in .txt format.

On 14 July 2009, the DO/EO/US mailed a second Notification of Defective Response (Form PCT/DO/EO/916) instead of Notification of Abandonment indicating the sequence listing was again defective.

On 24 September 2009, the DO/EO/US mailed a Notification of Abandonment (Form PCT/DO/EO/909).

On 13 November 2009, applicants filed the present petition under 37 CFR 1.181 and a new sequence listing file.

# **DISCUSSION**

The Notification of Defective Response mailed 02 June 2009 set a one month, non-extendable time limit for reply. Applicant's correspondence filed 24 June 2009 did not include a complete and proper reply to the Notification of Defective Response mailed 02 June 2009. Specifically, a proper sequence listing in computer readable form was not provided. Accordingly, the present application became abandoned on 03 July 2009 for failure to timely file a proper reply to the Notification of Defective Response mailed 02 June 2009. The Notification of Defective Response mailed 14 July 2009 was sent in error since the application was already abandoned.

## CONCLUSION

Applicants' petition under 37 CFR 1.181 is **DISMISSED AS MOOT**.

The Notification of the Defective Response mailed 14 July 2009 is hereby <u>VACATED</u>.

The Notification of Abandonment mailed 24 September 2009 is hereby <u>VACATED</u>.²

See the attached sequence listing error report.

² It is noted that the present application remains abandoned for the reasons discussed above.

Application No.: 10/583,415

Any further correspondence with respect to this matter should be directed to Mail Stop PCT, Commissioner for Patents, Office of PCT Legal Administration, P.O. Box 1450, Alexandria, Virginia 22313-1450, with the contents of the letter marked to the attention of the Office of PCT Legal Administration.

PCT Special Programs Examiner Office of PCT Legal Administration

Telephone: (571) 272-4557

Byanlm

Bryan Lin

PCT Legal Examiner

Office of PCT Legal Administration

Sequence Listing was accepted.

If you need help call the Patent Electronic Business Center at (866) 217-9197 (toll free).

Reviewer: Durreshwar Anjum

Timestamp: [year=2009; month=11; day=25; hr=16; min=13; sec=19; ms=585;

## Validated By CRFValidator v 1.0.3

Application No:

10583415

Version No:

3.0

Input Set:

Output Set:

**Started:** 2009-11-13 09:17:41.643

Finished: 2009-11-13 09:17:44.386

Elapsed: 0 hr(s) 0 min(s) 2 sec(s) 743 ms

Total Warnings: 15

Total Errors: 0

No. of SeqIDs Defined: 15

Actual SeqID Count: 15

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M	213	Artificial	or	Unknown	found	in	<213>	in	SEQ	ID	(8)
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#### SEQUENCE LISTING

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	GRASSL, RENATE	
	MILLER, STEFAN	
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- Val Ser Thr Glu Ser Ser Asn Gly Val Ile Lys Ile Ser Ser Leu Pro 145 150 155 160
- Gln Ala Leu Ala Gly Ala Asp Asp Thr Thr Ala Met Thr Pro Leu Lys
  165 170 175
- Thr Gln Gln Leu Ala Val Lys Leu Ile Ala Gln Ile Ala Pro Ser Lys 180 185 190
- Asn Ala Ala Thr Glu Ser Glu Gln Gly Val Ile Gln Leu Ala Thr Val 195 200 205
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- Tyr Thr Phe Met Asn Ser Thr Ala Thr Glu Glu Tyr Lys Gly Val Ile 225 230 235 235
- Lys Leu Gly Thr Gln Ser Glu Val Asn Ser Asn Asn Ala Ser Val Ala 245 250 255
- Val Thr Gly Ala Thr Leu Asn Gly Arg Gly Ser Thr Thr Ser Met Arg 260 265 270
- Ala Ser Ser Ala Leu Ala Trp Asn Ala Asp Val Ile His Gln Arg Gly 290 295 300
- Gly Gin Thr Ile Asn Gly Thr Leu Arg Ile Asn Asn Thr Leu Thr Ile 305 310 315
- Ala Ser Gly Gly Ala Asn Ile Thr Gly Thr Val Asn Met Thr Gly Gly 325 330 335

Tyr Ile Gln Gly Lys Arg Val Val Thr Gln Asn Glu Ile Asp Arg Thr 340 345 350

The Pro Val Gly Ala The Met Met Trp Ala Ala Asp Ser Leu Pro Ser 355 360 365

Asp Ala Trp Arg Phe Cys His Gly Gly Thr Val Ser Ala Ser Asp Cys 370 375 380

Pro Leu Tyr Ala Ser Arg Ile Gly Thr Arg Tyr Gly Gly Ser Ser Ser 385

Asn Pro Gly Leu Pro Asp Met Arg Gly Leu Phe Val Arg Gly Ser Gly 405 410 415

Arg Gly Ser His Leu Thr Asn Pro Asn Val Asn Gly Asn Asp Gln Phe 420 425 430

Gly Lys Pro Arg Leu Gly Val Gly Cys Thr Gly Gly Tyr Val Gly Glu 435 440 445

Val Glm Lys Glm Glm Met Ser Tyr His Lys His Ala Gly Gly Phe Gly 450 455 460

Glu Tyr Asp Asp Ser Gly Ala Phe Gly Asn Thr Arg Arg Ser Asn Phe 465 470 475 480

Val. Gly Thr Arg Lys Gly Leu Asp Trp Asp Asn Arg Ser Tyr Phe Thr
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35 40 45

App Ala Ser Ser Thr Thr Lys Gly Ile Leu Phe Leu Ala Thr Glu Gln 50 55 60

Glu Val Ile Asp Gly Thr Asn Asn Thr Lys Ala Val Thr Pro Ala Thr 65 70 75 80

Leu Ala Thr Arg Leu Ser Tyr Pro Asn Ala Thr Glu Ala Val Tyr Gly 85 90 95

Leu Thr Arg Tyr Ser Thr Asp Asp Glu Ala Ile Ala Gly Val Asn Asn 100 105 110

Glu Ser Ser Ile Thr Pro Ala Lys Phe Thr Val Ala Leu Asn Asn Val 115 120 125

Phe Glu Thr Arg Val Ser Thr Glu Ser Ser Asn Gly Val Ile Lys Ile 130 135 140

Ser Ser Leu Pro Gln Ala Leu Ala Gly Ala Asp Asp Thr Thr Ala Met 145

The Pro Leu Lys Thr Gln Gln Leu Ala Val Lys Leu Ile Ala Gln Ile 165 170 175

Ala Pro Ser Lys Asn Ala Ala Thr Glu Ser Glu Gln Gly Val Ile Gln 180 185 190

Leu Ala Thr Val Ala Gln Ala Arg Gln Gly Thr Leu Arg Glu Gly Tyr
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Tyr Val Gly Glu Val Gln Lys Gln Gln Met Ser Tyr His Lys His Ala

435 440

Gly Gly Phe Gly Glu Tyr Asp Asp Ser Gly Ala Phe Gly Asn Thr Arg 450 455 460

Arg Ser Asn Phe Val Gly Thr Arg Lys Gly Leu Asp Trp Asp Asn Arg 475 465 470

Sor Tyr Phe Thr Asn Asp Gly Tyr Glu Ile Asp Pro Ala Ser Gln Arg 485 490 495

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H:s Ala Ala Ile Ala Ala Ile Ser Pro Ala Gly Val Asn Gly Val Pro 35 40 45

Asp Ala Ser Ser Thr Thr Lys Gly Ile Leu Phe Ile Pro Thr Glu Gln 50 55 60

Glu Val Ile Asp Gly Thr Asn Asn Thr Lys Ala Val Thr Pro Ala Thr 65 70 75 80

Lou Ala Thr Arg Leu Ser Tyr Pro Asn Ala Thr Glu Thr Val Tyr Gly 90 85

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Glu Ser Ser Ile Thr Pro Ala Lys Phe Thr Val Ala Leu Asn Asn Ala 115 120 125

Pho Glu Thr Arg Val Ser Thr Glu Ser Ser Asn Gly Val Ile Lys Ile 130 135 140

Ser Ser Leu Pro Gln Ala Leu Ala Gly Ala Asp Asp Thr Thr Ala Met 145 150 155 160

Thr Pro Leu Lys Thr Gln Gln Leu Ala Ile Lys Leu Ile Ala Gln Ile 165 170 175

Ala Pro Ser Glu Thr Thr Ala Thr Glu Ser Asp Gln Gly Val Val Gln 180 185 190

heu Ala Thr Val Ala Gln Val Arg Gln Gly Thr Leu Arg Glu Gly Tyr 195 200 205

Ala Ile Ser Pro Tyr Thr Phe Met Asn Ser Ser Ser Thr Glu Glu Tyr 210 215 220

Lys Gly Val Ile Lys Leu Gly Thr Gln Ser Glu Val Asn Ser Asn Asn 225

Ala Ser Val Ala Vai Thr Gly Ala Thr Leu Asn Gly Arg Gly Ser Thr 245 250 255

Thr Ser Met Arg Gly Val Val Lys Leu Thr Thr Thr Ala Gly Ser Gln 260 265 270

Ser Gly Gly Asp Ala Ser Ser Ala Leu Ala Trp Asn Ala Asp Val Ile 275 280 285

Gin Gln Arg Gly Gly Gln Ile Ile Tyr Gly Thr Leu Arg Ile Glu Asp 290 295 300

Thr Phe Thr Ile Ala Asn Gly Gly Ala Asn Ile Thr Gly Thr Val Arg 305 310 315 320

Met Thr Gly Gly Tyr Ile Gln Gly Asn Arg Ile Val Thr Gln Asn Glu

325 330 335

Ile Asp Arg Thr Ile Pro Val Gly Ala Ile Met Met Trp Ala Ala Asp 340 345 350

Ser Leu Pro Ser Asp Ala Trp Arg Phe Cys His Gly Gly Thr Val Ser 355 360 365

Ala Ser Asp Cys Pro Leu Tyr Ala Ser Arg Ile Gly Thr Arg Tyr Gly 370 375 380

Gly Asn Pro Ser Asn Pro Gly Leu Pro Asp Met Arg Gly Leu Phe Val 385 390 395 400

Arg Gly Ser Gly Arg Gly Ser His Leu Thr Asn Pro Asn Val Asn Gly 405 410 415

Asn Asp Gln Phe Gly Lys Pro Arg Leu Gly Val Gly Cys Thr Gly Gly 420 425 430

Tyr Val Gly Glu Val Gln Ile Gln Gln Met Ser Tyr His Lys His Ala  $\pm 435$  440 445

Gly Gly Phe Gly Glu His Asp Asp Leu Gly Ala Phe Gly Asn Thr Arg 450 455 460

Arg Ser Asn Phe Val Gly Thr Arg Lys Gly Leu Asp Trp Asp Asn Arg

Ser Tyr Phe Thr Asn Asp Gly Tyr Glu Ile Asp Pro Glu Ser Gln Arg
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Gln Ser Ala Leu Ser Lys Ile Ser Asn Ile Gly Val Asn Gly Ile Pro 35 40 45

Asp Ala Ser Met Glu Val Lys Gly Ile Ala Met Ile Ala Ser Glu Gln 50 55 60

Glu Val Leu Asp Gly Thr Asn Asn Ser Lys Ile Val Thr Pro Ala Thr 65 70 75 80

hou Ala Thr Arg Leu Leu Tyr Pro Asn Ala Thr Glu Thr Lys Tyr Gly 85 90 95

Leu Thr Arg Tyr Ser Thr Asn Glu Glu Thr Leu Glu Gly Ser Asp Asn 100 105 110

Asn Ser Ser Ile Thr Pro Gln Lys Leu Lys Tyr His Thr Asp Asp Val

Phe Gln Asn Arg Tyr Ser Ser Glu Ser Ser Asn Gly Val Ile Lys Ile 130 135 140

Ser Ser Thr Pro Ala Ala Leu Ala Gly Val Asp Asp Thr Thr Ala Met 145

Thr Pro Leu Lys Thr Gln Lys Leu Ala Ile Lys Leu Ile Ser Gln Ile 165 170 175

Ala Pro Ser Glu Asp Thr Ala Ser Glu Ser Val Arg Gly Val Val Gln 180 185